

## CAREER PROFILE

### Imrich Chlamtac

Imrich Chlamtac holds a Ph.D. in Computer Science from the University of Minnesota (1979) and B.Sci. and M.Sci. degrees in mathematics with Highest Distinction from Tel Aviv University (1977). Dr. Chlamtac is the President of Create-Net, a European research consortium. Dr. Chlamtac was recruited by the University of Texas at Dallas in Fall 1996 to build a bridge to Telecom Corridor, the largest concentration of telecommunications companies in US. As Distinguished Chair in Telecommunications endowed Professor, the Director of CATSS, and Associate Provost for Research, he was instrumental in building up one of the largest industry - university partnerships funded through TexTec and other successful initiatives. Prior to joining UTD, Dr. Chlamtac was on faculty at Technion - the Israel Institute of Technology, the University of Massachusetts at Amherst and the Photonics Center at Boston University. Dr. Chlamtac holds several honorary appointments including the Bruno Kessler Honorary Professor, University of Trento, Italy, the Sackler Professorship at Tel Aviv University, Honorary Professorship at the Beijing University of Posts and Telecommunications, the "University Professorship" at the Budapest University of Technology and Economics (BUTE), Hungary, a Doctor of the Hungarian Academy of Sciences and Honorary Membership of the BUTE Senate. Dr. Chlamtac is the co-founder and past President of CONSIP, the first network emulator company, and of BCN, one of the largest system integrator companies in central Europe.

In 1993 Dr. Chlamtac was elected Fellow of the IEEE for his work on ad-hoc access protocols and in 1997 he became a Fellow of the ACM for introducing the concept of lightpaths, the foundation for today's optical WDM networks. In 1994 he received the Fulbright Scholarship. He is the 2001 recipient of the ACM Award for Outstanding Contributions to Research on Mobility and the 2002 recipient of the IEEE Award for Outstanding Technical Contributions to Wireless Personal Communications. Dr. Chlamtac is a winner of the New Talents in Simulations Award from the Society of Computer Simulation for the concept of network emulators (1980) and the recipient of multiple ACM and an SPIE best paper awards. He has lectured worldwide as IEEE Distinguished Lecturer (1993 and 2000-2001), and was the plenary and keynote speaker at leading conferences. Between 1990 and 2004 Dr. Chlamtac has secured research funding as principal investigator of over \$25M in USA and since 2004 was instrumental in raising over \$20M at Create-Net in Europe. During 1997-2004 Dr. Chlamtac lead highly successful corporate funding activities through CATTS and TexTech centers. He has graduated over thirty PhD students and published over four hundred refereed journal and conference articles. He is the co-author of multiple Books, Book and Encyclopedias Chapters, including the first textbook on LAN-s entitled "Local Networks: Motivation, Technology and Performance" (1980), "Wireless and Mobile Network Architectures", (John Wiley & Sons 2000), the latter an IEEE Network Editor's choice, as well as Amazon.com engineering books best-seller, and "Broadband Services to Businesses and Communities" (John Wiley & Sons 2004). In 2008 Dr. Chlamtac was listed in ISIHighlyCited.Com among 250 most cited Computer Science researchers worldwide.

Dr. Chlamtac is the founding Editor in Chief of the ACM/Springer Wireless Networks (WINET), the ACM/Springer Journal on Special Topics in Mobile Networks and Applications (MONET). Dr. Chlamtac is the founder and past Chairman of ACM SigMobile, the Special Interest Group on Mobile Computing and Networking. He served as EiC of the SPIE Optical Magazine and was on the editorial boards and advisory boards of IEEE Transactions on Communications, Computer Networks and ISDN Systems, High Speed Networks Journal, Telecommunication Systems, the Photonic Network Communications Journal and the Journal of Graph Algorithms and Applications. Dr. Chlamtac was the General Chair of leading ACM and IEEE conferences and is also the founder and Steering Committee Chair of ACM/IEEE MobiCom, the world premier conference on mobility. While at Create-Net Dr. Chlamtac established multiple leading events in cooperation between Create-Net, IEEE, ACM and ICST, including IEEE/Create-Net Securecomm, IEEE/Create-

Net Broadnets, IEEE Create-Net Comsware, WiOpt, Mobiquitous among others. Since 2007 Dr. Chlamtac was appointed as Chair of the Scientific Committee of ICST [www.icst.org](http://www.icst.org), where he leads the scientific strategy of the society, recognized in a 2008 DG-Info report on European societies as leading European society listed after IEEE and ACM with well over a hundred conferences and workshops worldwide, over two dozen scientific journals and related activities dedicated to the promotion of ICT as the driving force for the evolution of society. In 2009 Dr. Chlamtac was elected as President of the European Alliance for Innovation (EAI) <http://european-alliance.eu/>, dedicated to building grassroots innovation in Europe, and in the same year was instrumental in acquiring the KIC award from EIT as part of the Trentino Province effort in the ICT area.

# CURRICULUM VITAE

## 1. PERSONAL

Name: Imrich Chlamtac  
President, Create-Net International Research Association  
Bruno Kessler Honorary Professor, University of Trento  
Tel: (011) 39-335-600-6349  
Email: chlamtac@create-net.org  
Mailing Addresses: 901 Newberry Dr., Richardson, TX 75080,  
40 Via Alla Pelegrina, 38050 Cognola, Italy

## 2a. ACADEMIC DEGREES

1979 PhD. Computer and Information Sciences, University of Minnesota  
1977 M.Sci. Mathematics (Computer Science Division), Tel Aviv University  
1975 B.Sci. Mathematics, Tel Aviv University

## 2b. ACADEMIC POSITIONS HELD

January 2001-present: University of Trento, 2001-present, Bruno Kessler Honorary Professor  
University of Trento, 2007-present, Professore Straordinario  
Past Member of University International Advisory Panel for Scientific Research

Since January 2000 as member of the Rector's Advisory Council participated in the development of the University's various research units with emphasis on Computer Science and Telecommunications.

In summer 2001 consulted on establishing the International PhD School in Telecommunications. In summer 2002 asked by the Trentino Province and the University of Trento to lead a new effort to establish a Europe-wide international research consortium for development of technology and technology transfer, see CREATE-NET below.

- Supervising eleven PhD students.
- Supervising two Post Doctoral Students.
- Teaching nine courses.
- Generating significant funding as Principal Investigator for the University of Trento and Trento research system.
- Published 2 books, 25 invited book chapters, 43 refereed journal articles and 84 refereed conference articles.
- In cooperation with multiple University of Trento faculty and Create-Net funded PhD grants developed a Create-Net research program ranked by Miur in 2009 as top among all ICT independent research centers in Italy.
- Played one of the central roles in bringing EIT ICT Labs KIC and EAI.

**EIT ICT Labs:** In December 2009 EIT ICT Labs won the prestigious European race for excellence in innovation and became the new EIT Knowledge and Innovation Community in the ICT field. EIT ICT Labs will become a pan-European flagship uniting

Education, Research and Innovation for the Future Information and Communication Society. ICT will be used by the EIT ICT Labs as the key enabler driving the transformation towards the Future Information and Communication Society. The aim is to generate individual satisfaction as well as sustained economic growth and social benefits throughout Europe. ICT Labs Consortium - participated by the Trentino System of high Standard Education and Research - has been recognized as the European Network with the most relevant partners among Europe. EIT ICT Labs will develop and deliver: excellence and entrepreneurship in education; Future Internet infrastructures; novel ICT services - for individual, business and society user-involved solutions for research and development; European open innovation ecosystem for ICT and its applications.

**European Alliance for Innovation (EAI):** The Trento ICT Research ecosystem, under Create-Net coordination, is the main driver, of the European Alliance for Innovation (EAI), a non-profit organization that brings under the same roof the major actors in the ICT innovation lifecycle. The mission of the EAI is to serve as an incubator for fostering innovation in the ICT sectors of society, providing points-of-access at all levels of the innovation cycle. The unique approach of EAI consists of involving active participation of member organizations and empowering their communities through a grassroots approach, thus promoting effective technology transfer, entrepreneurial mindset in education, and increased competitiveness of European companies.

January 2003-present Founding President: CREATE-NET Research Consortium

Center for Research And Telecommunication Experimentation for Networked Communities  
[<http://www.create-net.org/>]

An independent non profit International Research Consortium founded by Universita di Trento, ITC-IRST, CNR-CNUCE, and Politecnico di Torino in Italy, Budapest University of Technology and Economics, Technion, Israel Institute of Technology and Technische Universitat Berlin, top ranked institutions in their respective countries.

The consortium is managed and coordinated through the central office in Trento. Create-Net combines highest quality research, addressing computer network architectures, telecommunications, security, applications and services challenges with experimentation on a unique real-life test-bed, leading to the transform advanced technologies into viable businesses models and technology transfer. Create-Net's activities are coordinated with over two dozen industry partners, including, Microsoft, Motorola, Ericsson, Nokia, Alcatel, Cisco, Siemens. Funded international academic cooperation includes, MIT, GeorgiaTech, OSU, Technion and Tsinghua Universities. Invited in March 2005 for a presentation on European Research Management by the European Parliament, Create-Net has been recognized as one of the leaders in research leadership and research globalization initiatives in Europe in less than two years from the time of its establishment. As part of its service to community Create-Net has developed over 50 Conferences and Workshops in the span of 18 months several as joint conferences with IEEE ComSoc, remaining in cooperation with IEEE ComSoc, IEEE CS, ACM, IFIP, NSF and EU-FET.

Among its many recognitions in 2009 Create-Net has been recognized as one of the top research centers in Italy by MIUR, among all private and non profit centers in all research disciplines. Create-Net occupied the top position among all ICT oriented independent centers. As part of recognitions by industry, Create-Net has been termed the "cutting edge of research diamond in Italy" in a press release by Cisco in 2009.

In its six years of operation from 2003 to 2009 Create-Net has secured over EUR 20,000,000 in funding and ranks among top research centers world wide in per researcher publications and funding.

September 2004 offer: Ohio Eminent Scholar, Ohio State University, Columbus, Ohio

Joint appointment as Endowed Chair Professor in Electrical Engineering and Computer Sciences Department, declined due to mutual commitment made to the University of Trento based on proposed Chiara Fama agreement and to the Province of Trentino to develop Create-Net.

January 1997- August 2004 (retired): The Distinguished Chair in Telecommunications Professor, Electrical Engineering Department; Professor, Computer Science Department, Director, CATSS, Associate Provost for Research, The University of Texas at Dallas.

(1998, 2000, 2003): Special appointment at the Provost office in 1998, 2000 and 2003 in Research Program and International Relations development.

In 1997 joined the Electrical Engineering Department as the Distinguished Chair Professor in Telecommunications, and since September 1997, upon a unanimous invitation from the Computer Science faculty, became a Professor of the Computer Science Department. Dr. Chlamtac accepted this position as a challenge to lead the establishment of a telecommunications research center and bond ties between the Telecom Corridor industry and University of Texas at Dallas. The Telecom Corridor, is the second largest high-tech area in the nation and the largest telecommunications business area in the world.

As reported in Business Week (<http://www.businessweek.com/adsections/telecom/teleanytime.htm>), "Dr. Imrich Chlamtac, the world class scholar in networking and communications arrived at UTD in 1998 from Boston University and is now heading the new Center for Advanced Telecommunications Systems and Services (CATTS)....Chlamtac, a former Fulbright Scholar and Digital Equipment Corporation employee, is a Fellow of the premier technical societies, a telecom industry icon whose vision is to transform UTD into a "telecom powerhouse".

Since 1997 Dr. Chlamtac worked closely with the University to build an internationally recognized research center and academic program in networking and communications based on scholarly excellence and on close cooperation with industry, with the vision to establish UTD as one of the national leaders in the telecommunications area. Currently, UTD is one of the fastest growing Engineering School in the country. Through his appointment as lead faculty in the school of engineering, together with several special appointments at the Provost office, Dr. Chlamtac was instrumental in a significant growth of the school of engineering. Since January 1997 the EE and CS departments has tripled its faculty and the external research funding, mostly in areas of networking and telecommunications. The student body has grown by 15% a year, the school is ranked 5th in the US in number of undergraduate EE/CSE degrees granted after UC Berkeley, Penn State, U. Michigan, and MIT. The school is second only to Stanford University in the number of Computer Science M.S. degrees granted annually.

Since joining UTD Dr. Chlamtac personally initiated or took a lead role in the following activities:

- (3/1998-2001): Director, Center for Advanced Telecommunication Systems and Services (CATSS), University of Texas at Dallas.

In March 1998 offered the position combining Center Director and Associate Provost functions. Dr. Chlamtac pioneered the establishment of the CATSS center and led it until 2001, and have performed various Associate Provost functions till September 2004 working from the Provost office. CATSS, formally approved by the state of Texas in September 1998, the center won support from many of the leading companies of the Telecom Corridor. The Center includes faculty members, graduate students, researchers

and post-doctoral students. It works in cooperation with the Telecom industry, in areas of commercial impact and applications such as Next Generation Internet, Mobile IP, Bluetooth, DWDM network management, and network design. The Center acts as an independent administrative/cost unit.

At CATTS, over the three years, Dr. Chlamtac lead research programs in cooperation with local Telecom industry. CATTS research funding comes from three sources, per project funding, CATTS membership fees, and government funding. PhD support in form of RA salaries and tuition comes from the state of Texas and from the TexTec initiative, currently supported by twelve companies, including SBC, ATT, TI, Motorola, Fujitsu, Nortel, AMD and Alcatel. Additional support for CATSS administration operation has been provided by the President's office.

- Initiated and played a magnet role in hiring eight additional TELECOM faculty at UTD in 1997-2000. In 1998-2000 chaired the Faculty hiring committee for TELECOM candidates.
- In 1997 proposed and spear-headed the establishment of a new undergraduate and MS programs of Telecommunications Engineering, the first ABET accredited program in the nation to award undergraduate degrees in Telecommunications (from 2000) and the first PhD program in Telecommunications Engineering (approved by national coordinating board 2002).
- Initiator and University of Texas at Dallas (2000) representative to TexTec the Texas organization founded in 1999 of industry partners to the Texas University System (Tex-Tec provides financial support for students and cooperation with member universities on various aspects of University telecommunications development).
- Initiated and directly executed, or personally contributed to, multiple international cooperation agreements between CATSS, or UTD, and Universities and organization around the world whose emphasis is on telecommunications technologies, including Tel Aviv University, the Budapest University of Technology and Economics Karlskrona University, Politecnico di Torino, The Telecom City (Sweden), The Telecom Valley (France).
- Founded the SPIE/Springer Optical Networks Magazine (ONM), founded and chaired the IEEE/SPIE/ACM OptiComm (Optical Networks and Applications) Conference (2000), continued to serve as Editor in Chief of the ACM/URSI/Kluwer WINET and MONET journals, and Chair of ACM SigMobile (1996-2001).
- Co-authored "Wireless and Mobile Network Architectures", John Wiley & Sons, ( October 2000), IEEE Network Magazine Editor's choice, Amazon.com engineering books best-seller (2000) and Fatbrain.com choice for wireless networks and best-seller (2001). Sold over three thousand copies within 100 days of publication.
- Between January 1997 and May 2002 supervised twenty one PhD students at CATTS, personally graduated 16 PhD students. Supervised multiple M.S. theses. PhD students won multiple TexTec student awards, one ACM and one SPIE Best Paper awards.
- Supervised five Post Doctoral Students.

1999-present: Budapest University of Technology and Economics, (formerly, the Technical University of Budapest), University Professor (Honorary Appointment).

1999-present: Tel Aviv University, Sackler Professor (Honorary Appointment).

January 1995-1997: Faculty, Photonics Center and Professor, Boston University.

Established the Advanced Communications Technologies (ACT) laboratory as joint venture between the Photonics Center and BCN Inc., as BCN President, with over thirty doctoral and post-doctoral researchers. ACT took part in nationwide research and commercial activities in wireless communication, and optical networking, conducting research funded by ARPA, NSF, BMDO, the Photonics Center and grants from industry. In 1996 it developed the first wireless tag system, and optical network design suite used by Alcatel, US Army and BMDO.

Founded ACM/URSI/Springer Wireless Networks (WINET) journal (1995), the largest distribution technical journal dedicated to wireless networking which, in 1999 designated as one of ACM Core Group Journals.

Founded ACM/Springer Journal of Selected Topics in Mobile Networks and Application (MONET) journal (1996).

Founded and chaired the ACM/IEEE MobiCom (Mobile Computing and Networking) Conference (1995), of which he continues to serve as Steering Committee Chair. Within four years of its inception MobiCom evolved into the premier technical conference on Mobility with over 700 attendees (2000). The MOBicom acceptance rate ranges between one out of twelve to fifteen articles submitted, and since 2003 Mobicom ranks number five out of over 1,300 in the CiteSeer Impact Factor ranking of CS conferences and publications worldwide.

Founding Chair of the ACM SigMobile group (SIG) on mobility (1997-2001). SigMobile is a multi-service SIG with the top conference on mobility (MOBICOM), over two dozen co-sponsored conferences and workshops in all areas of wireless and mobile systems, a well-recognized newsletter a prestigious awards portfolio. SigMobile brings together researchers and developers working on mobile computing and communication systems worldwide. Sig-Mobile publishes its peer reviewed Newsletter (MC2R).

Supervised seven PhD Students.

As Member, Photonics Center, Participated in the center's general planning and executive activities in networking and telecommunication. Executed projects to demonstrate feasibility of related wireless and optical technologies with the goal of bringing products to marketplace.

January-June, 1994: (Sabbatical) Fulbright Scholar and Professor, Department of Electrical Engineering and Computer Science, BUTE, Budapest University of Technology and Economics (formerly, the Technical University of Budapest), Hungary.

As Fulbright Scholar took part in national forums on higher education, consulted on the development of new PhD program at BUTE, collaborated with faculty, co-advised PhD students.

July-December 1994: (Sabbatical) Department of Department of Electrical and Computer Engineering, Stanford University.

Participated in joint research leading to the prototyping of an all-optical packet switched network.

1987-1994: Associate Professor, Tenured, Electrical and Computer Engineering Department.

Affiliated Faculty Member, Department of Computer and Information Science.  
University of Massachusetts, Amherst.

Developed the area of networking in the department through research, teaching and service focused on developing communications and networking research and teaching programs. Supervised over a dozen Masters and PhD theses, developed multiple new courses, represented the University on networking and telecommunication issues in multiple University and State wide committees and panels.

1981–1987: Lecturer, Promoted to Senior Lecturer (corresponding Assistant to Assoc. Prof. in 1994), Computer Science Department.

Technion, Haifa, Israel.

Research in the areas of computer communication networks, performance analysis and simulation. Participated in fund raising and establishment of Distributed Computation and Communication Laboratory. Developed courses in networks, communications, distributed systems, simulation and performance analysis. Supervised seven Masters and two PhD theses. Two students awarded the Ministry of Telecommunications First Price for Best Theses.

1979–1980:

- (1) Visiting Assistant Professor, Computer Science Department, University of Minnesota. Teaching, research and student advising.
- (2) Research Associate, University Computer Center, University of Minnesota.  
Research in the area of back-end storage networks and local area computer networks. Design and analysis of network protocols and implementation feasibility evaluation for local area network test-beds.

1977–1979:

- (1) Teaching Associate, Computer Science Department, University of Minnesota.  
Assisted in graduate courses and taught undergraduate courses in computer science.
- (2) Research Assistant, Special Interactive Computation Laboratory, University of Minnesota.  
Research in design and development of tightly coupled communication systems, using a HYPERchannel based Computer Center back-end storage network. Conducted performance evaluation using queuing theory and simulation tools, and participated in network protocol design using formal specification and verification tools.

1976–1977: Adjunct Faculty, Shenkar College, Ramat Gan, Israel.

Teaching and assisting in preparation of courses in computer applications, systems and programming languages.

1974–1977: Teaching Assistant, (1996-1977 Instructor) Department of Mathematics.

Tel Aviv University, Tel Aviv, Israel.

Teaching undergraduate courses in Computer Science.

## **2c. INDUSTRIAL POSITIONS HELD**

1994-1998: Co-founder and past President (1994-1995) BCN Inc and BCN Kft.

A technology transfer and system integrator company active in research and development of wireless communication systems and in providing system integrations solutions to major corporations. In research and development BCN specialized in small scale wireless communication systems, and software for network development and management. Among others, in 1995 BCN developed the first wireless label system for supermarkets and department stores.



In 1997 it developed an optical networks intelligent design tool, CATO, integrated in Alcatel's development suite with approximately 50 full time employees.

Internationally, BCN Kft ([www.bcn.hu](http://www.bcn.hu)) specialized in systems integration and training activities providing business, banking, telecommunications, health, manufacturing and educational markets with data and telecommunications products and services, with offices in Central Europe and customers worldwide. BCN installed solutions included cabling, hardware, software, services, applications and customer support in the LAN, MAN, enterprise and country-wide data networks, the introduction of video conferencing to new markets, ISDN business solutions, and design and delivery of a national VoIP network. BCN was a Gold Partner of Cisco and 3Com corporations and distributor of over two dozen international communications equipment vendors. After partial merger in 1997 BCN was acquired by the Deutsche Telecom's enterprise networking business unit with a peak of 800 employees.

1985–1987: Founder and President of CONSIP Inc. (Israel). Software house developing simulation tools for the design, evaluation and operation of data communications networks, major customers, including Intel, Motorola Semiconductors, Codex, Fibronics and Raphael. CONSIP introduced the concept of "Network Emulators" and built the first Ethernet emulator used for customer support by Motorola, Intel and Fibronics. In 1987 licensed all software to Codex, Motorola.

1980–1982: Principal Engineer, Project Manager, Digital Equipment Corporation, U.S.A. Planned, lead and organized projects in the area of local area networks, in particular the Ethernet and CI networks. Responsible for analyzing current and future technical requirements for distributed data processing – virtual terminal protocols and remote host processing, and their implementation in local networking. Evaluated protocol alternatives for extension of the DECNET architecture to local networking. Identified needs and developed analytic and simulation modeling tools for modeling and evaluation of distributed systems.

1975–1976: Department Head and Project Manager, Statistics Department. Operations Branch, IDF, Government of Israel. Responsible for information systems automation and integration.

### **3. PARTIAL LIST OF PAST CONSULTING ACTIVITIES**

Alcatel: Optical Network Management Protocols (1997-1999).

Motorola ISG: Protocols for Cable Networks (1995-1996).

ESL Inc.: Protocols for Wireless Tag Systems(1994).

Digital Equipment Co.: Protocols and feasibility study of an integrated data/video/audio distribution system (1992).

GTE Laboratories: Design and evaluation of protocols for the SCM Multi-Channel MAN Network (1991).

Windata Co.: Evaluation of protocols for wireless LAN-s (1990).

Codex Co.: Development of a T1 based architecture for a new integrated local/wide area network (1987-88).

Israel Ministry of Communication: Interactive tools development for design and evaluation of digital communication systems (1986).

Israeli Government: Design, integration and performance evaluation of mobile radio network protocols for land and marine deployment (1986).

Motorola Inc.: Software and hardware development of the 802.4 Token Bus Local Area Network: protocol specification, verification, algorithm design, protocol software, network management and performance evaluation using hybrid (simulation/analytic) models. Representation in IEEE 802.4 standards committee (1985-86).

Codex Co.: Design and evaluation of Ethernet concentrators and LAN integration, (1985-86).

Fibronics Int.: Development and construction of algorithms and protocols for supporting real time applications on Ethernet (1984-85).

Intel Co.: Modeling performance evaluation and development of algorithms for management of 802.3 (Ethernet) LAN and 82586 (INTEL) prioritized Ethernet chip (1983-84).

Digital Equipment Co.: Voice and Data Integration in Local Area Networks (1982-84).

Networks Systems Co.: Participated in the evaluation and protocol design of Network Systems' HYPERchannel and HYPERbus access layer and data link layer protocols (1979-80).

#### **4. GRANTS (1991-2004)**

##### **Individual US PI and Co-PI Awards**

Synchronization Protocols for Wireless Multimedia Systems, PI, Texas ARP/ATP, PI, (2002-2004), (\$240,000).

Provisioning Differentiated Services in IP over Optical Networks, PI, Alcatel Co. (2002-2004), (\$108,000).

A Reliable, Available, High Performance Integrated Multimedia Delivery (RAPID) Tactical Communication System - ARO, PI, (1997-2001), (\$200,797).

A Scalable Communication Integrated Optical Network (SCION) for Bandwidth Greedy Multimedia Applications, - NSF, PI, (1997-2001), (\$378,351).

On Demand Wavelength Routing in Support of Flexible and High Speed Internet, PI, NSF, (1999-2001),(\$94,158).

Energy/Delay Efficient Protocols for Wireless Access - Continuation, - NSF, (1998-2000), (\$300,000).

A Generic Control Channel Mechanism for Mobile Multi-hop Networks - DARPA, PI, (1997-2000), (\$523,000).

Virtual Prototyping of Optical Communications Systems, - BMDO, (1997-2000), (\$350,000) core funding, with matching funds (\$1,800,000).

Energy/Delay Efficient Protocols for Wireless Access - NSF, PI, (1997-1997), (\$74,995).

vBNS proposal for the Creation of High-Bandwidth Regional Infrastructure with National Connectivity, Co-Participant, submitted by the Center for Computational Science, ECE and Physics Departments, Boston University, - NSF, Co-Participant, (1996-1998), (\$350,000).

Research Experiences for Undergraduates (REU) - Division of Networking and Communications Research and Infrastructure (NCRI), NSF, PI, (1996-1997), (\$5,000).

High Speed Wireless Communication and Interconnection - DURIP, DOD, PI, (1995-1997), (\$400,000), with matching funds (\$550,000).

Infrared Intelligent Tags - Photonics Center, Boston University, and NRL, PI, (1995-1996), (\$150,000).

A CAD Tool for Optical Networks and Interconnects - U.S. Army Space and Strategic Defense Command, PI, (1995-1996), (\$58,463).

A Generalized Approach to WDM Optical Packet Switched Networks - NSF, PI, (1994-1998), (\$169,999).

Consortium for the Development of Methods and Components for Optical Contention Resolution in High Speed Networks - ARPA, PI, (jointly with Stanford University and GTE Laboratories) (1993-1996), (\$2,834,000).

High Speed All Optical Networks - DARPA, PI, (1989-92), (\$402,000).

Routing for Tactical and Strategic Communication in Radio Networks - ARO, PI, (1991-94), (\$185,000).

Adaptive CDMA-TDMA Control in Radio Networks - SLCRO-IP, PI, (1992-1995), (\$75,000).

High Speed Parallel Interconnection Systems: Distributed Control and Analysis - NSF, PI, (1991-1992), (\$50,000).

A Solution to Inter-satellite SS-OSBS TDMA Control - COMSAT, Co-PI, (1990-1991), (\$28,950).

### **UTD-CATSS Research Center Grants Total**

Excluding direct graduate students support from Telecom Corridor companies or TexTec funding, (1988 - 2001):(**\$7,710,063**).

Design and Analysis of Photonic Packet-Switched Networks NSF, (2002-2007, \$320,953).

Differentiated Reliability in Multi-Layer Optical Networks, NSF-CISE, (2001-2003), (\$500,119).

Multi-Layer Optical Networks, Brazil National Research Foundation, (2001-2003), (\$1,300,000).

Graph Drawing and Visualization, TRP, (1998 - 2000) (\$118,940).

Optical Networks on Demand (NSF), (2000-2003), \$400,000.

Optical Pseudo Channels: Using The Optical Layer to Minimize Queuing Delays for Real-Time Traffic, ARP, (2000-2002) (\$101,150).

Graph Visualization Technology, NIST, Advanced Technology Program, (1998-2001), (\$2,000,000).

Teletex 1999, AFCEA, (\$20,000).

Quality on Demand in Telecommunications, MCI, (1998-1999), (\$100,000).

Interworking between IP and WDM in the Next Generation Internet - Alcatel USA, (1998-1999), (\$25,000).

TSMA Protocols for Ad-hoc Networks - Rockwell - Collins, (1998-1999), (\$25,000).

A Scalable Simulator for Mobile IP Networks - Nortel, (1998-1999), (\$75,000).

Survivability Analysis in Optical Networks - Alcatel USA, (1998), (\$94,890).

Optical Networks Simulator - BMDO USA, (1997-2000),(\$2,600,000).

## **PARTIAL LIST OF European Grants Awards**

(Only Grants received as Principal Investigator, (2002 - 2009): **(EUR total 10,130,631.00)**).

MIUR, Mesh Networks (WING) (EUR 300,000).

MIUR, Living Lab, (EUR 368,000).

I-Chip, December 2005, (EUR 280,000).

EU 6th Framework, Biologically-inspired Autonomic Networks and Services (BIONETS), coordinating institution - CREATE-NET, PI, (Consortium Total EUR 5,050,000, Create-Net EUR 1,185,553).

EU 6th Framework, Pervasive Ultra-wideband Low Spectral Energy Radio Systems(PULSARS II), coordinating institutions - GWT and Technical University Berlin, (EUR 80,121).

EU 6th Framework, SAMBA, (EUR 385,538).

EU 7th Framework, Diconet (EUR 237,236).

EU 7th Framework March, Fit4Green (EUR 348,993).

EU 7th Framework, ComplexEnergy (EUR 55,640)

MIUR-CENECA (Italian Ministry of Education "Rientro dei Cervelli" Award, (2003-2005), (EUR 409,550).

Center for Research And Telecommunication Experimentation for Networked Communities (CREATE-NET), Center PostDoc Awards (2004-2007), PAT, Italy, PI, (EUR 480,000.00).

Center for Research And Telecommunication Experimentation for Networked Communities PAT, Italy, PI, (CREATE-NET). PI, Seed Funding (2003-2005), (EUR 6,000,000).

## **5. AWARDS**

### **5.1 Professional Awards and Recognitions**

\* Honorary Professor, Beijing University of Posts and Telecommunications (2006)

\* Listed in the 2005 ISIHighlyCited.Com database of most cited 250 Computer Science researchers in the world.

\* 2003 MIUR-CENECA (Italian Ministry of Education "Rientro dei Cervelli" Award.

\* The 2002 IEEE TCPC Award for Outstanding Technical Contributions to Wireless Personal Communications.

\* Honorary Chairman, State of Texas Business Advisory Council (2002).

\* The 2001 ACM SigMobile Award for Outstanding Contributions to Research on Mobility of Systems, Users, Data, and Computing, "recognizing an individual who has made a significant and lasting contribution to research on mobile communications and wireless networking".

- \* The Bruno Kessler Honorary Professor, University of Trento, Italy (2000).
- \* Sackler Professor, Tel Aviv University, Israel (1999), "Award to Preeminent Faculty", one of fourteen awards worldwide.
- \* University Professor, Budapest University of Technology and Economics, Hungary, (1999).
- \* Honorary Member of the Senate, the Technical University of Budapest, Hungary (1997 - ).
- \* Fellow, ACM (1997 - ).
- \* Fellow, IEEE (1993 - ).
- \* Doctorem Habilem, Budapest University of Technology and Economics, December, 1996.
- \* IEEE Communications Society Distinguished Lecturer (1994, and 2000-2002).
- \* Fulbright Scholar (1994).
- \* Member of the Board, American Telecommunication Systems Management Association (1996 - ).
- \* VIP IEEE PIMRC, (1996).
- \* VIP IEEE INFOCOM, (1996).
- \* ACM Service Award (1995).
- \* United States National Committee Delegate, International Union of Radio Science (USNC-URSI), the XXII and XXIII General Assemblies (1987, 1990).
- \* IEEE Network Editor's choice, Wireless and Mobile Network Architectures, John Wiley & Sons (2000).
- \* Best Paper, ACM MOBICOM/MSWiM (2000).
- \* Best Paper, SPIE Photonics East (1999).
- \* Best Paper, ACM SIGCOMM (1987).
- \* New Talents in Simulation Award (1982), Society for Computer Simulation.
- \* Listed in Marquis' Who's Who in the World (1996-), Who's Who in the World Milenium edition 2000, Who's Who in America (1995-), Golden Anniversary Edition of Who's Who in America (1996), Silver Anniversary Edition of Who's Who in the East (1995), Who's Who in Science and Engineering (1996-), Who's Who in the Media and Communications (1997-), Who's Who in Finance and Industry (1997-).

## **5.2 Partial List of Plenary, Keynote and Inauguration Address Invitations till 2006:**

- \* Autonomic Communication Models for the Emerging Internet, Beijing University of Posts and Telecommunications, Honorary Professor Award Presentation, Beijing, December 2006.
- \* Pervasive Adaptation: Designing Pervasive Information and Communication Systems, IST 2006 - Strategies for Leadership, Helsinki, November 2006.
- \* Nature and Society as Models for Next Generation Internet, IEEE CAMAD, Trento, June 2006.

- \* Convergence of Man and Machine Processes in the Emerging Internet, The 25th Anniversary IEEE Infocom Keynote, Barcelona, May 2006.
- \* Internet Evolution - from Man Made to Nature Made Rule in Pervasive Communication Environments, Athens Institute of Technology, Athens, September 2005.
- \* Pervasive Sensor Environments - Challenges and Opportunities, The IEEE International Conference on Mobile Ad-hoc and Sensor Systems, Washington, DC, November 2005.
- \* The Third Revolution after the Internet - Services, Brussels, January 2005 , European Commission.
- \* New Paradigms for Emerging Global Networks, HICSS, Keynote, Hawaii, January 2005.
- \* Future Pervasive Environments Based on Biocommunications, The Second Annual Conference on Wireless On demand Network Systems and Services, Keynote, St. Moritz, Switzerland, January 2005.
- \* BIONETS - Application of genetic exchange rules to pervasive networks and parallels from system science, The 1st IFIP TC6 WG6.6 Workshop on Autonomic Communication (WAC 2004), Keynote, Berlin, Germany, October 2004.
- \* Protocols for Ad hoc networks, Med-Hoc Networks Workshop, Keynote, Turkey, June 2004.
- \* Convergence of Pervasive Communication and Knowledge, NSF-RPI Workshop on Pervasive Computing and Networking, Keynote, Troy, NY, April 2004.
- \* Protocols for Bandwidth Management in Third Generation Optical Networks, The International Conference on Parallel Processing (ICPP-2003), Keynote Address, Taiwan, October 2003.
- \* Optical Bandwidth Management Constructs for IP Applications, 7th IFIP Conference on Optical Network Design and Modeling, Keynote Address, Budapest, Hungary, February 2003.
- \* Plenary Address - the Second International Workshop on QOS in MultiService IP Networks, Milan, Italy, February 2003.
- \* Optical Bandwidth Management for Community Networks, 4th International Workshop on Distributing Computing (IWDC), Keynote Address, Calcutta, India, December 2002.
- \* Protocols for Bandwidth Management in Third Generation Optical Networks, High Performance Computing (HiPC), IEEE/ACM International Conference on High Performance Computing, Keynote Address, Bangalore, India, December 2002.
- \* Inauguration Address - School of Management, Catholic University of Piacenza, Italy, November 2002.
- \* PESC (Physical and Engineering Sciences of European Science Foundation - ESF) Workshop on : "Is Mobile Ad hoc Networking Part of the Future of Mobile Networking in Europe?", "Ad-hoc Networks in USA and Europe, a path to follow?", Keynote Address, Monterosso, Italy, October 2002.
- \* Distinguished Invited Lecture, the Eleventh IEEE International Conference on Computer Communications and Networks (IC3N'2002), September, 2002.
- \* Optical Networks Management, Suntec Singapore International Convention, "Communications Horizons", September 2002, Singapore.
- \* Future of Optical Networks, IFIP Networking Conference Keynote Address, Pisa, Italy, May 2002.

- \* Inauguration Address - International PhD School in Telecommunications, University of Trento, December 2001.
  - \* From Ad-Hoc to Bluetooth, ACM MobiCom 2001, Rome, Italy, August 2001.
  - \* Sensor Networks and their Role in Home Networking, in the 1st International Workshop on Parallel and Distributed Computing Issues in Wireless Networks and Mobile Computing (WNMC 2001) (in conjunction with IEEE Symposium on Parallel and Distributed Processing Systems - IPDPS), April 2001.
  - \* All-optical Networks, Ardent Workshop, January 2000.
  - \* Ad-hoc Networking - The Future, in the IEEE Mobile Access Conference, Hong Kong, December 1999.
  - \* Scalable Modeling of Wireless Networks, in the Second ACM/IEEE International Workshop on Modeling and Simulation of Wireless and Mobile Systems, Seattle, Washington, August 1999.
  - \* Mobile Computing Trends, in NSF Workshop on Future Directions in Mobile Computing and Networking Systems, Cincinnati, Ohio, June 1999.
  - \* Modeling and Simulation of Mobile Systems, in the IEEE Conference on Simulation Methods and Applications (CSMA'98), Florida, November 1998.
- Emerging Models for Mobile Communication Systems", in the IFIP International Conference on the Performance and Management of Complex Communication Networks, (PMCCN '97), Japan, November 1997.
- \* Wireless and Ubiquitous, in the 6th IEEE International Conference on Computer Communications and Networks (IC3NP'97), Las Vegas, Nevada, September 1997.
  - \* Issues in Mobile Computing, in the 7th IEEE International Conference on Personal, Indoor, and Mobile Radio Communications (PIMRC'96), Taiwan, September 1996.
  - \* Power Management in Mobile Systems, in the National Workshop on Distributed Systems: Algorithms, Architecture and Languages, Levico, Italy, August 1996.
  - \* Robust Communication in Multi-Hop Mobile Networks, in the 4th IEEE International Conference on Computer Communications and Networks (IC3NP'95), Las Vegas, Nevada, September 1995.

### **5.3 Partial List of Distinguished Lecture Invitations till 2002:**

- \* Multiple IEEE Distinguished Lectures in USA, Italy, China, and South America in 2000-2002.
- \* The Center for Satellite and Hybrid Communication Networks (CSHCN) at the University of Maryland, Advanced Networks Colloquium of Prominent Research, September 2000.
- \* The Wireless Enterprise Challenge Forum, Tampa, Florida, April 2000.
- \* The Nortel Distinguished Lecturer, Richardson, Texas, 1999.
- \* The Barr Systems Distinguished Lecturer for 1999-2000,
- \* Distinguished Lecture in Computer Science and Computer Engineering, 1999-2000, University of Cincinnati.

- \* The Menger Distinguished Lecture, Illinois Institute of Technology, 1997.
- \* IEEE-Northern Telecom-BNR Distinguished Lecture series in Telecommunications, 1993, (USA).
- \* IEEE MTT, COM, ED and AP Societies 1993 Distinguished Lecture Series (Europe).

## **6. PROFESSIONAL ACTIVITIES**

### **6.1 Journals: Editorship**

#### **Editor in Chief**

- \* ACM/Springer Journal on Special Topics in Mobile Networks and Applications (MONET), Founding Editor-In-Chief (1995-).
- \* ACM/URSI/Springer Wireless Networks Journal (WINET), Founding Editor-In-Chief (1996-).
- \* SPIE/Kluwer Optical Networks Magazine, Founding Editor-In-Chief (2000-2004).

#### **Member of Advisory Board**

- \* Telecommunication Systems Journal, Modeling, Analysis, Design and Management
- \* The Journal of Graph Algorithms and Applications (JGAA)

#### **Member of Editorial Board**

- \* IEEE Transactions on Communications, Editor for the Areas of Computer Networks, Queuing Models, and Optical Networks Architectures.
- \* Computer Networks and ISDN Systems Journal, Member Editorial Board.
- \* Journal of High Speed Networks, Member Editorial Board.
- \* Telecommunication Systems Journal, Member Editorial Board.
- \* Photonic Network Communications Journal, Member Editorial Board.

#### **Guest Editor till 1998**

- \* European Transactions on Telecommunications (ETT), Special Issue on WDM Networks, 1999, with Marco A. Marsan and A. Fumagalli.
- \* ACM/Kluwer Journal on Special Topics in Mobile Networking and Applications (MONET), Special Issue on Protocols and Software Paradigms of Mobile Networks, 1998, with D. Lee and Mischa Schwartz.
- \* IEEE Transactions on Computers, Special Issue on Mobile Computing, 1996, with J. Lin.
- \* Journal of High Speed Networks, Special Issue on Optical Networks, 1995, with A. Fumagalli.
- \* IEEE Journal on Selected Areas in Communications, Special Issue on Networks in the Metropolitan Area, 1993, with J. Mollenauer, A. Akyildiz and C. Szabo.



\* Proceedings of the IEEE, Special Section on High-Speed Communication Networks, January 1990, with W. R. Franta.

## **6.2 Partial List of Conference Organization Activities till 2006**

### **General Chair**

\* IEEE/Create-Net/ICST Intersense 2006, The First International Conference on Integrated Internet Ad Hoc and Sensor Networks, Nice, France, May 2006.

\* IEEE/Create-Net/ICST CollaborateCom 2005, The First International Conference on Collaborative Computing, San Jose, CA, December 2005.

\* IEEE/Create-Net First International Conference on Security and Privacy for Emerging Areas in Communication Networks in Mobile Networks, Athens, Greece, September 2005.

\* IEEE/ACM/IAAA/NSF/EU/Create-Net International Conference on Mobile and Ubiquitous Systems (MobiQuitous), Boston, August, 2004.

\* IEEE/ACM/Create-Net Workshop on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks (WiOpt'04), Cambridge England, April 2004.

\* IEEE/SPIE/ACM Conference on Optical Networks and Applications (OPTICOMM), Dallas, TX, October 2000.

IEEE/ACM/SPIE Optical Networks Workshop, Dallas, December 1999.

\* IPSS Workshop on Nomadic Computing, 1997.

\* ACM/IEEE Conference on Mobile Computing and Networking, (MobiCom) Berkely, CA, 1995.

\* IEEE Computer Communications Workshop, Florida, 1994.

\* ACM SigComm, San Francisco, CA, 1993.

### **Program Chair**

\* IEEE International Conference on Computer Communications and Networks (IC3NP'98).

### **Steering, Advisory, Scientific and Honorary Board Appointments**

\* Member International Advisory Committee, IEEE Computer Society International Conference on Advanced Information Networking and Applications, AINA, (2007-).

\* Founder and Steering Committee Chair, Create-Net International Conference on Biological Models in Networking and Communication(BioNetics), (2006 - ).

\* Founder and Steering Committee Chair, Create-Net International Conference on Performance Evaluation Methodologies and Tools (ValueTools), (2006 - ).

\* Founder and Steering Committee Chair, IEEE/Create-Net International Conference on Software in Communications (Comsware), (2005 - ).

\* Founder and Steering Committee Chair, Create-Net First International Conference on Multimedia Services Access Networks (MobiMedia), (2005 - ).

- \* Founder and Steering Committee Chair, Create-Net First International Wireless Internet Conference(Wicon), (2005 - ).
- \* Founder and Steering Committee Chair, IEEE/Create-Net First International Conference on Security and Privacy for Emerging Areas in Communication Networks in Mobile Networks (SecureComm), Athens, Greece, August 2005, (2005 - ).
- \* Founder and Steering Committee Chair, IEEE/Create-Net International Conference on BroadBand Networks (BroadNets), (2004 - ).
- \* Founder and Steering Committee Chair, IEEE/Create-Net International Conference on Testbeds and Research Infrastructures for the Development of Networks and Communities (Tridentcom), (2004 - ).
- \* Founder and Steering Committee Chair, IEEE/Create-Net International Conference on Collaborative Networking, Applications, and Worksharing (CollaborateCom), (2004- ).
- \* Founder and Steering Committee Chair, Create-Net International Conference on Quality of Service in wired/wireless High-Speed Networks (QShine), (2004 - ).
- \* Founder and Steering Committee Chair, Create-Net International Workshop on Grid Networks (Gridnets), (2004 - ).
- \* Founder and Steering Committee Chair, IEEE/Create-Net International Workshop on Broadband Advanced Sensor Networks (BASENETS), (2004- ).
- \* Founder and Steering Committee Chair, Create-Net International Conference on Mobile and Ubiquitous Systems, (Mobiquitous), (2003 - ).
- \* Steering Committee, IFIP/Create-Net International Workshop on Wireless On-demand Networks (WONS), (2003 - ).
- \* Steering Committee Chair, IEEE/Create-Net Conference on Modeling and Optimization in Mobile Ad Hoc and Wireless Networks (WiOpt), (2003 - ).
- \* Steering Committee Chair, IFIP International Conference on Personal Wireless Communications, PWC (2003).
- \* Founder and Steering Committee Chair, SPIE/IEEE/ACM Conference on Optical Communication and Networking (OPTICOMM), co-sponsored by IEEE ComSoc, ACM SigComm, and SPIE TGON (2000-2003).
- \* World Wide Congress (Official Framework of 3G Wireless), International Advisory Committee (2003-2004).
- \* IEEE Design of Reliable Communication Networks (DRCN) Workshop, Organizing Committee (2003).
- \* The International Association of Science and Technology for Development (IASTED), International Conference on Parallel and Distributed Computing and Systems (PDCS 2002), Advisory Board.
- \* The International Association of Science and Technology for Development (IASTED), International Conference on Parallel and Distributed Computing and Systems (PDCS 2001), Advisory Board.
- \* Honorary Member Scientific Committee, International Symposium on Telemedicine and Teleeducation in Practice, ISTEP-2000, Slovak Republic, (2000).

- \* The International Conference on Parallel and Distributed Computing and Systems (PDCS), the International Association of Science and Technology for Development (IASTED), Advisory Committee (1999-2000).
- \* IEEE International Conference on Parallel Processing (IWGC), Group Communication, Advisory Committee (1999).
- \* ACM International Workshop on Wireless Mobile ATM (wmATM), Advisory Committee (1999).
- \* The 1999 IEEE International Workshop on Mobile Communications, International Technical Organizing Committee (1999).
- \* ACM International Workshop on Mobile Wireless Multimedia, Steering Committee (1998-).
- \* International Conference on Computer Communications and Networks (IC3NP), Steering Committee (1996).
- \* IEEE International Symposium on Personal Indoor Mobile Radio Communication, International Advisory Committee (1996).
- \* The Second European Workshop on Mobile/Personal Satcoms (EMPS), Scientific Committee (1996).
- \* Founder and Steering Committee Chair, ACM/IEEE Conference on Mobile Computing and Networking (MobiCom), co-sponsored by IEEE ComSoc, ACM SigComm, Sigops, Sigmetrics, Sigact and Cesis NASA (1995 - ).
- \* International Workshop on Queuing Networks with Finite Capacity, Scientific Committee (1994).
- \* International Symposium On Modeling and Simulation Methodology, Advisory Committee (1986).

### **Program and Technical Committees**

- \* Wi-Fi Workshop, Technical Program Committee, Italy (2004).
- \* IEEE Symposium on Optical Networking, ICC2004, Technical Program Committee, France, (2004).
- \* IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS-2003), International Program Committee Marina del Rey, (2003).
- \* IEEE ICC Optical Networking, Technical Program Committee (2003).
- \* IEEE International Symposium on Network Computing and Applications (NCA-03), Technical Program Committee (2003).
- \* Globecom 2002, Optical Symposium, Program Committee.
- \* ICETA, International Conference on Emerging Telecommunications, Technologies and Applications, October 2001, Honorary International Program Committee.
- \* International Workshop on Parallel and Distributed Computing Issues in Wireless Networks and Mobile Computing, IPDPS 2001 Workshops, April 2001, Program Committee.
- \* SPIE Smart Sensor WEB Conference in SPIE's 45 Annual Meeting on Optical Science and Technology, August 2000, Program Committee.

- \* The 6th IFIP TC6 WG6.2, WG6.3, WG6.4, TC7 WG7.3, International Conference on the Performance and QoS of Next Generation Networking, 2000, Program Committee.
- \* The 4th IEEE/IFIP International Workshop on Mobile and Wireless Communications (MWCN'2000), Program Committee.
- \* The 5th Workshop on Personal Wireless Communication (PWC'2000), IFIP TC6, WG6.8 - Wireless Communication, Program Committee.
- \* IEEE ICT 2000, Technical Committee.
- \* IEEE International Conference on Network Protocols (ICNP), 2000, Program Committee.
- \* Networking 2000, sponsored by IFIP WG6.2 (Broadband Communications - BB), IFIP WG6.3 (Performance of Communication Systems - PCN) and IFIP WG6.4 (High Performance Networking - HPN), 2000, Program Committee.
- \* International Conference on Telecommunication Systems, Modeling and Analysis 1993, 1994, 1995 and 2000 Program Committee.
- \* Second International Conference on Telecommunications and Electronic Commerce (ICTEC), 1999, Program Committee.
- \* IEEE International Conference on Computer Communications and Networks (IC3NP), 1999, 1996 Program Committee.
- \* 1st Symposium on ATM Technology Users (ATMU'99), 1999, International Program Committee.
- \* First International Conference on Telecommunications and Electronic Commerce (ICTEC), 1998, Program Committee.
- \* The IEEE International Conference on Network Protocols, 1998, Program Committee.
- \* The Fourth SPIE Conference on All-Optical Networking: Architecture, Control and Management Issues, 1998, Program Committee.
- \* ACM/IEEE Conference on Mobile Computing and Networking, (ACM/IEEE MobiCom), 1998, 1997 and 1996 Program Committee.
- \* SPIE Symposium on Multimedia Systems, Technologies, and Engineering (1997), Program Committee.
- \* The 3rd SPIE Conference on All-optical Communication Systems: Architectures, Protocols and Control Issues, 1977, Program Committee.
- \* 3rd International Conference on the Performance and Management of Complex Communication Networks (PMCCN) 1997, Program Committee.
- \* First International Workshop on Satellite-based Information Services, 1996, Program Committee.
- \* IEEE InfoCom, 1998, 1997, 1996, 1991, Program Committee.
- \* XIV Conference of the European Association of Operational Research Societies, EURO XIV, 1995, Session Chair.
- \* International Conference on Local and Metropolitan Communication Systems, LAN & MAN, 1994, Program Committee.
- \* ACM SigComm, 1993, Program Committee.

- \* FORTE, 5th International Conference on Formal Description Techniques for Protocol Specification, 1993, Program Committee.
- \* Second International Workshop on Queuing Networks with Finite Capacities, 1992, Program Committee.
- \* IEEE Computer Communications Workshop, 1991, Chair, Optical Networks.
- \* IEEE International Conference on Distributed Computing Systems, 1991, 1990, 1987 International Program Committee.
- \* Melecon, 1989, Member Technical Subcommittee for Developments in Switching Systems.
- \* International Conference on Computer Communication (ICCC), 1988, International Program and Organization Committees.
- \* IMACS International Symposium on Simulation of Computer Communication Systems, 1988, Program Committee.
- \* URSI General Assembly 1987, Session Organizer, Packet Radio Communication.

### **6.3 Partial List of Public Professional Activities till 2001**

Member Executive Committee, ACM SigMobile (2001 -).

Founder and Chairman of ACM SigMobile (1997 - 2001).

Co-Founder and Steering Committee Member of the SPIE Technical Group on Optical Networks, TGON, (1999-).

Member of International Standard Organization (ISO), (1985-1987).

Member IFIP Technical Committee, Working Group WG 6.3, Task Force on Performance of Communication Systems (1994-2000).

### **6.4 Partial List of Invited Technical Lectures till 2001:**

#### *Academic Presentations:*

Massachusetts Institute of Technology, Stanford University, University of Pennsylvania, University of Illinois, Georgia Institute of Technology, Pennsylvania State University, University of Minnesota, University of Michigan, Cornell University, Technical University of Berlin, Politecnico di Milano, Politecnico di Torino, University of Paris, Technical University of Vienna, Technical University of Budapest, Hebrew University of Jerusalem, Tel Aviv University, Hong Kong University of Science and Technology, Nara Institute of Science and Technology, Chinghua University, IIT Karagpour.

#### *Industrial Presentations:*

DEC, Hudson, Mass.; IBM T.J. Watson Research Center, Yorktown Heights, N.Y.; Motorola, Austin, TX; Codex, Mansfield, Mass.; MCC, Austin, TX; SRI Int., Menlo Park, CA; U.S.Army COMMO Group, Atlanta, GA; ATT Bell Labs, Holmdel, N.J., Bell Labs; Murray Hill, N.J.; NASA Ames, CA; Siemens Info. Syst., Boca Raton, Fl., Bell Comm. Research, Morristown, N.J; INRIA; Rocquencourt, France; CERN, Geneva, France; Hahn-Meitner Inst., Berlin, Germany, GE Corporate Research Ctr., Schenectady, N.Y.; GTE Laboratories, Waltham, Mass., IBM Research Center, Zurich, Switzerland.

## 7. CURRENT RESEARCH TOPICS

- Wireless and Mobile Network Architectures
- Biologically Inspired Engineering in Communication
- Pervasive Environments
- Multimedia Networks and Protocols
- Optical Network Architectures
- Algorithms for Communication Systems
- Analytical Performance Evaluation Methods
- Intelligent Network Design and Simulation Tools

## 8. PARTIAL LIST OF PATENTS

- Information Transmission Network, August 2006, European Patent.
- Communication Networks Performing Service Functions, April 2005, European Patent.
- Method and System for On-Demand Connection Establishment in Wavelength Division Multiplexing Networks, December 2001, USA and International Patent.
- System, Device, and Method for Contentions Based Reservations in a Shared Medium Network, USA and International Patent, September 1999.
- System, Device and Method for Sharing Contention Minislots among Multiple Priority Classes, USA and International Patent, March 1999.

## 9. PARTIAL LIST OF PUBLICATIONS

### THESES

1. **I. Chlamtac**, “Radio Packet Broadcasted Computer Network”, M.Sc. Thesis, Tel Aviv University, December 1976.
2. **I. Chlamtac**, “Multi-Access Channel Packet Switching Protocols”, PhD. Thesis, University of Minnesota, December 1979.

### BOOKS

3. **Ming Li, Roberto Riggio, Francesco De Pellegrini, and Imrich Chlamtac**, *Resource Management in IEEE 802.11 based Wireless Networks*, in *Wireless Multimedia: Quality of Service and Solutions*, Igi Global, 2008.
4. **I. Chlamtac, A. Gumaste and C. Szabo**, *Broadband Services to Businesses and Communities: User Needs, Business Models and Technologies*, John Wiley & Sons, February 2005.
5. **Y. Bing Lin and I. Chlamtac**, *Wireless and Mobile Network Architectures*, John Wiley & Sons, October 2000.

6. **I. Chlamtac**, *Optical Networking and Communications*, Edited Volume, SPIE - The International Society for Optical Engineering, October 2000.
7. **W. R. Franta and I. Chlamtac**, *Local Networks*, Lexington-Books, First edition 1981, Second edition, 1982, Third edition, 1983.

#### PARTIAL LIST OF BOOK CHAPTERS

8. **T. Chen, H. Zhang, X. Zhou, G. M. Maggio, and I. Chlamtac**, *CogMesh: A Cluster Based Cognitive Radio Mesh Network -Cognitive Wireless Networks: Concepts, Methodologies and Visions*, F. Fitzek and M. Katz Editors, Springer Press, September 2009.
9. **D. Miorandi, I. Chlamtac, S. Steglich, I. Radusch, and D. Linner, J. Huusko, and J. Lahti**, *Bionets: Bio-Inspired Paradigms for Service Provisioning in Pervasive Computing Environments*, "At your service: Service Engineering in the Information Society Technologies Program", E. di Nitto, P. Traverso, A. Zwegers and A. Sassen Editors, MIT Press, 1st edition, ISBN 978-0-262-04253-6, 2009.
10. **N. Scalabrino, D. Miorandi, E. Gregori and I. Chlamtac**, *Multimedia Internet Applications over WiMAX Networks: State of the Art and Research Challenges*, to appear in "Encyclopedia of Internet Technologies and Applications", Editors: Mrio Freire and Manuela Pereira, editors, Encyclopedia of Internet Technologies and Applications, Idea Group Publishers, ISBN 978-1591409939, 2008.
11. **X. Zhou, H. Zhang, T. Chen, and I. Chlamtac**, *Transmit Power Control among Cooperative and Competitive Cognitive Radio Nodes*, "Cognitive Radio Networks", Edited by Dr. Yang Xiao and Dr. Fei HU, Auerbach Publications, CRC Press, 2008.
12. **N. Scalabrino, D. Miorandi, F. De Pelegrini, R. Riggio, I. Chlamtac and E. Gregori**, *Quality of Service Scheduling for WiMax Networks*, in *WiMAX/MobileFi: Advanced Research and Technology*, Auerbach Publishers, Y. Xiao Editor, December 2007.
13. **T. Chen, H. Zhang, X. Zhou, G. Maggio, and I. Chlamtac**, *CogMesh: A Cluster Based Cognitive Radio Mesh Network*, *Cooperative and Cognitive Networks*, ed. M. Katz, Springer Publishers, 2007.
14. **M. Li, F. De Pellegrini, and I. Chlamtac**, *Resource Management in IEEE 802.11 based Wireless Networks*, *Wireless Multimedia: Quality of Service and Solutions*", N. Cranley and L. Murphy Editors), Idea Group Inc, 2007.
15. **N. Scalabrino, D. Miorandi, E. Gregori and I. Chlamtac**, *Quality of Service Scheduling for WiMAZ Networks*, to appear in *WiMax/MobileFi: Advanced Research and Technology*", Edited by Y. Xiao, CRC Press 2007.
16. **I. Carreras, F. De Pellegrini, C. Kiraly, and I. Chlamtac**, *Data Management in Wireless Sensor Networks*, in *Global Data Management*, Editors R. Baldoni, G. Cortese, F. Davide and A. Melpigano, IOS Press, 2006.
17. **I. Carreras, I. Chlamtac, F. De Pellegrini, C. Kiraly, D. Miorandi, and H. Woesner**, *A Biological Approach to Autonomic Communication Systems*, in *Transactions on Computing Systems in Biology*, Springer Verlach, Volume 39, Lecture Notes in Computer Science, 2-6.
18. **T. Chen, H. Woesner, and I. Chlamtac**, *MAC Protocols for Millimeter-Wave Wireless LAN and PAN*, to appear in "Millimeter Wave Technology in Wireless PAN, LAN, and MAN, Edited by S. Xiao, M. Zhou, and Y. Zhang, Auerbach Publications, CRC Press, ISBN: 9780849382277, 2006.

19. **Q. Wu, W. Chen, A. Pang, Y. Bing Lin, and I. Chlamtac**, *NTP VoIP Testbed: A SIP Based Wireless VoIP Platform*, in Handbook of Algorithms for Wireless Networking and Mobile Computing, CRC Press, 2005.
20. **I. Carreras, I. Chlamtac, H. Woesner, and C. Kiraly**, *BIONETS: Bio-Inspired Next Generation Networks*, in Autonomic Communications, M. Smirnoff (editor), LNCS, Springer Science, New York 2005
21. **H. Zhu and I. Chlamtac**, *QoS for Multimedia Services in Wireless Networking*, in Resource Management in Wireless Networking, edited by Mihaela Cardei, Ionut Cardei and Ding-Zhu Du, Resource Management in Wireless Networking, in Series: Network Theory and Applications, Vol. 16, Springer, March 2005.
22. **I. Chlamtac, I. Carreras, and H. Woesner**, *The Case Study of Bionetic Sensor Networks*, in Advances in Pervasive Computing and Networking, B.K. Szymanski and B. Yener (editors), Springer Science, New York 2005.
23. **I. Chlamtac and J. J-N Liu**, *Mobile Ad-Hoc Networking with a View of 4G Wireless: Imperatives and Challenges*, Overview Chapter 1, in Mobile Ad Hoc Networking, S. Basagni, M. Conti, S. Giordano, I. Stojmenovic (Editors), by IEEE Press and John Wiley& Sons 2004.
24. **S. Ganguly, R. Izmailov, and I. Chlamtac**, *Hybrid Hierarchical Optical Network*, in Emerging optical network technologies: Architectures, Protocols and Performances. Editors: K. M. Sivalingam, S. Subramaniam, Springer Science, New York 2004.
25. **A. Gumaste, C. Szabo, and I. Chlamtac**, *Backbone Network Design for Community Networks*, in Broadband Services to Businesses and Communities: User Needs, Business Models and Technologies, John Wiley & Sons, 2004.
26. **A. Gumaste, N. Ghani, and I. Chlamtac**, *Fiber in the Last Mile*, in Broadband Services to Businesses and Communities: User Needs, Business Models and Technologies, John Wiley & Sons, 2004.
27. **I. Chlamtac and J. Redi**, *Mobile Computing: Challenges and Opportunities*, in Encyclopedia of Computer Science, 4th Edition, A. Ralston, E. D. Reilly, and D. Hemmendinger, Editors, John Wiley & Sons, 2003.
28. **I. Chlamtac, W. R. Franta, and J. Jue**, *Emerging Optical Network Management*, in The Handbook of Optical Communication Networks, CRC Press LLC, April 2003.
29. **C.F. Chiasserini, I. Chlamtac, P. Monti, and A. Nucci**, *Optimal Energy Design of Wireless Ad Hoc Networks*, in Lecture Notes in Computer Science (LNCS) number 2345. Editors Enrico Gregori, Marco Conti, Andrew T. Campbell, Guy Omidyar, Moshe Zukerman, 2002.
30. **I. Chlamtac, W. R. Franta, and J. Jue**, *Optical Control Planes in SONET & IP Oriented Optical Networks*, in World Market Series Business Briefing: Global Optical Communications, co-published by SPIE and Optical Internetworking Forum, 2002.
31. **I. Chlamtac, and W. R. Franta**, *2002: A Big Year for Optical Networking*, in World Market Series Business Briefing: Global Optical Communications, co-published by SPIE and Optical Internetworking Forum, July 2001.
32. **I. Chlamtac**, *Optical Networks*, in Encyclopedia of Computers and Computer History, R. Rojas, Editor, Fitzroy Dearborn Publishers, Chicago, Ill., 2000.
33. **I. Chlamtac and J. Jue**, *Optical WDM Networks: Future Vision*, in Optical WDM Networks: Principles and Practice, K. Sivalingam and S. Subramaniam eds., Kluwer Academic Publishers, 2000.



34. **I. Chlamtac, A. Fumagalli, and L. Valcarenghi**, *Use of AI Techniques for Designing Optical Networks*, in Computational Intelligence in Telecommunications Networks, Witold Pedrycz and Athanasios V. Vasilakos, Editors CRC Press, September 2000.
35. **I. Chlamtac, A. Fumagalli, C. Ruszczyk, and G. Wedzinga**, *Intelligent Simulation for Computer Aided Design of Optical Networks*, in Optical Network Design and Modeling, Chapman & Hall Publishers, edited by H. Van As and A. Jukan, 1998.
36. **I. Chlamtac, Y. Bing Lin, and J. Redi**, *When Mobility Meets Computation*, in Encyclopedia of Microcomputers (James G. Williams, Editor), Marcel Dekker Publishers, and in Encyclopedia of Library and Information Science (Allen Kent, Editor), Marcel Dekker Publishers, Vol. 22, 1998.
37. **I. Chlamtac, M. El-Zarki**, *Introduction to Computer Networks*, in Encyclopedia of Telecommunications, Vol. 9, 1994, Marcel Dekker publisher.
38. **I. Chlamtac, A. Ganz and M. Kienzle**, *An HIPPI Interconnection System*, in Advances in Local and Metropolitan Area Networks, IEEE Computer Society Press, 1994.
39. **I. Chlamtac, A. Ganz and M. Kienzle**, *A Performance Model of a Connection Based Hypercube Interconnection System*, in Computer Performance Evaluation, G. Balbo and G. Serazzi editors, Elsevier Science Publishers, The Netherlands, 1992.
40. **I. Chlamtac, O. Ganz and Z. Koren**, *Prioritized Demand Assignment Protocols and Their Evaluation*, in Perspectives on Packetized Voice and Data Communication, W. Lidinsky and D. Vlack editors, IEEE Press, 1991.
41. **I. Chlamtac**, *An Ethernet Compatible Protocol for Real Time Voice/Data Integration*, in Perspectives on Packetized Voice and Data Communication, W. Lidinsky and D. Vlack editors, IEEE Press, 1991.
42. **A. Ganz and I. Chlamtac**, *Finite Buffer Queuing Models for Single and Multiple Transmissions Channel Access Protocols*, in Computer Performance and Reliability, editors, G. Iazeolla, P. J. Courtois and O. J. Boxma, North-Holland-Elsevier Science Pub., 1988.
43. **I. Chlamtac and A. Rozenboim**, *CONSHIP – Concurrent Network Simulation Package*, in Computer Networks and Simulation, editor, S. Schoemaker, North-Holland-Elsevier Science Pub., 1986.
44. **I. Chlamtac**, *A Programmable VLSI Controller for Standard and Prioritized Ethernet Local Networks*, in Local Area & Multiple Access Networks, editor R. L. Pickholtz Computer Science Press, Inc., 1986.
45. **I. Chlamtac**, *EDDIE: An Efficient Design for a Distributed Simulation Engine*, in Distributed Simulation, Editor P. Reynolds, Society for Computer Simulation Press, 1985.

#### PARTIAL LIST OF ARTICLES IN REFEREED JOURNALS

46. **H. Du, X. Huang, J. Liang, J. Liu, B. G. Evans, and I. Chlamtac**, “Cross-layer Quality-driven Adaptation for Scheduling Heterogeneous Multimedia over 3G Satellite Networks”, to appear in *ACM/Springer Wireless Networks*.
47. **P. Li, Y. Fang, N. Scalabrino, E. Gregori, and I. Chlamtac**, “How to Effectively Use Multiple Channels in Wireless Mesh Networks?” to appear in *IEEE Transactions on Parallel and Distributed Systems*.
48. **Y. Ye, H. Woesner, and I. Chlamtac**, “Switching Techniques in Optical Networks”, to appear in *OSA Journal of Optical Networking (JON)*.

49. **R. Riggio, D. Miorandi, F. De Pellegrini, F. Granelli, and I. Chlamtac**, “Bottom-Up Design Patterns and the Energy Web”’, *IEEE Transactions on Systems, Man, and Cybernetics*, Part A: Systems and Humans, to appear in 2010.
50. **I. Carreras, D. Miorandi, R. Saint-Paul, and I. Chlamtac**, “Bottom-Up Design Patterns and the Energy Web”’, *IEEE SCM Transactions*, Part A, 2009.
51. **P. Li, N. Scalabrino, Y. Fang, E. Gregori and I. Chlamtac**, “How to Effectively Use Multiple Channels in Wireless Mesh Networks”, *IEEE Transactions on Parallel and Distributed Systems*, Feature Article of the November Issue, Vol. 20 No.11, November 2009.
52. **M. Chen, Min, V. Leung, S. Mao, Y. Xiao, M. Li, and I. Chlamtac**, “Hybrid Geographical Routing for Flexible Energy-Delay Trade-offs”’, *IEEE Transactions on Vehicular Technology*, Vol. 58. No. 9, 2009.
53. **I. Carreras, D. Miorandi, and I. Chlamtac**, “A Simple Model of Contact Patterns in Delay-Tolerant Networks”’, *ACM/Springer Wireless Networks*, 2009.
54. **H. Du, B. G. Evans, and I. Chlamtac**, “QoS-Aware Adaptation for Satellite Multimedia Broadcasting via Hierarchical Packet Scheduling”, *IEEE Wireless Communications Magazine*, Vol. 16, No. 3, June 2009.
55. **H. Zhu, Y. Tang, and I. Chlamtac**, “Unified Collision-Free Coordinated Distributed Scheduling (CF-CDS) in IEEE 802.16 Mesh Networks”, *IEEE Transactions on Wireless Communications*, October 2008.
56. **R. Riggio, D. Miorandi, F. De Pellegrini, F. Granelli, and I. Chlamtac**, “A Traffic Aggregation and Differentiation Scheme for Enhanced QoS in IEEE 802.11-based Wireless Mesh Networks”’, Elsevier’s Computer Communications Journal, Vol. 31, No. 7, May 2008.
57. **I. Chlamtac, H. Lee, Y. Lin, and M. Tsai**, “An OSA Service Capability Server for Mobile Services”’, *International Journal of Pervasive Computing and Communications*, 4(3), 2008.
58. **G.V. Zaruba, M. Huber, F. A. Kamangar, and I. Chlamtac**, “Indoor Location Tracking Using RSSI Reading from a Single Access Point”, *ACM/Springer Wireless Networks (WINET)*, Vol. 13, No. 2, April 2007.
59. **J. Liu, G. Xiao, K. Lu, and I. Chlamtac**, “An Evaluation of Distributed Parallel Reservations in Wavelength-Routed Networks”’, *IEEE Journal on Selected Areas of Communications (JSAC)*, November 2007.
60. **I. Carreras, I. Chlamtac, F. De Pellegrini, and D. Miorandi**, “BIONETS: Bio-Inspired Networking for Pervasive Communication Environments”, *IEEE Transactions on Vehicular Technology*, Vol. 56, No. 1, January 2007.
61. **M. Li, H. Zhu, I. Chlamtac, and B. Prabhakaran**, “End-to-end QoS Framework for Heterogeneous Wired-cum-Wireless Networks”, *ACM/Springer Wireless Networks (WINET)*, Vol. 12, No. 4, August 2006.
62. **Y. Ye, H. Woesner, and I. Chlamtac**, “Node Architectures for Aggregation of Traffic from Access Networks, Communications”, *Journal of the Chinese Institute of Engineers (JCIE)*, Vol. 29, No. 7, 2006.
63. **H. Zhang, X. Zhou, K. Y. Yazdandoost, and I. Chlamtac**, “Multiple Signal Waveforms Adaptation in Cognitive Ultra-Wideband Radio Evolution”’, Special Issue of UWB Wireless Communications - Theory and Applications, *IEEE Journal on Selected Areas of Communications (JSAC)*, Vol. 24, No. 4, April 2006.

64. **H. Zhu and I. Chlamtac**, "A Framework for Admission Control and Bandwidth Reservation in Multi-hop Ad-hoc Networks", *Elsevier Computer Networks*, available online, August 2005.
65. **H. Zhu and I. Chlamtac**, "Performance Analysis for IEEE 802.11e EDCF Service Differentiation", *IEEE Transactions on Wireless Communications*, Vol. 4, No. 4, July 2005.
66. **R. Whitaker, L. Hodge, and I. Chlamtac**, "Bluetooth Scatternet Formation: A Survey", *Ad-Hoc Networks Journal*, Vol. 3, No. 4, July 2005.
67. **K. Lu, G. Xiao, and I. Chlamtac**, "Analysis of Blocking Probability for Distributed Light-path Establishment in WDM Optical Networks", *IEEE/ACM Transactions on Networking*, Vol. 13, No. 2, February 2005.
68. **G. Xiao, K. Lu, and I. Chlamtac**, "An Evaluation of Distributed Wavelength Provisioning in WDM Optical Networks with Sparse Wavelength Conversion", *IEEE/OSA Journal on Lightwave Technology*, Vol. 22, No. 7, July 2004.
69. **G. Zeng and I. Chlamtac**, "Nonlinear Observers for Two Classes of Perturbed Systems", to appear in *International Journal of Computers and Mathematics With Applications*, pp. 387-398, 2004.
70. **C.F. Chiasserini, I. Chlamtac, P. Monti, and A. Nucci**, "An Energy-Efficient Method for Nodes Assignment in Cluster-Based Ad Hoc Networks", *ACM/Kluwer Wireless Networks (WINET)*, May 2004.
71. **H. Zhu, M. Li, I. Chlamtac, and B. Prabhakaran**, "Survey of Quality of Service in IEEE 802.11 Networks", *IEEE Wireless Communications Magazine, Special Issue on Mobility and Resource Management*, Vol. 11, No. 4, 2004.
72. **J. Liu, B. Li, T. Hou, and I. Chlamtac**, "On Optimal Layering and Bandwidth Allocation for Multi-Session Video Broadcasting", *IEEE Transactions on Wireless Communications*, Vol. 3, No. 2, March 2004.
73. **A. Gumaste and I. Chlamtac**, "Light-trails: An Optical Solution for IP Transport", *OSA Journal of Optical Networking (JON)*, Special Issue Next-Generation WDM Network Design and Routing. (3), (2004).
74. **I. Chlamtac, P. Lin, and Y. Bing Lin**, "Overflow Control for UMTS High-Speed Downlink Packet Access", *IEEE Transactions on Wireless Communications*, March 2004.
75. **P. Lin, Y. Bing Lin, and I. Chlamtac**, "Module Count-Based Overflow Control Scheme for UMTS High Speed Downlink Packet Access", *IEEE Transactions on Vehicular Technology*, Vol. 53, No. 2, March 2004.
76. **C. Petrioli, S. Basagni, and I. Chlamtac**, "Bluemesh - Degree Constraint Multihop Scatternet Formation" in the Special Issue on "Advances in Research of Wireless Personal Area Networking and Bluetooth Enabled Networks, *ACM/Kluwer/SPIE Mobile Networks and Applications (MONET)*, Vol. 9, No. 2, February 2004.
77. **K. Lu, J. P. Jue, T. Ozugur, G. Xiao, and I. Chlamtac**, "Intermediate-Node Initiated Reservation (IIR): A New Signaling Scheme for Wavelength-Routed Networks", *IEEE Journal on Selected Areas in Communications*, Vol. 21, No. 8, October 2003.
78. **H. Zeng and I. Chlamtac**, "Adaptive Guard Channel Allocation and Blocking Probability Estimation in PCS Networks", *Computer Networks*, Vol. 43, No. 7 October 2003.
79. **S. Basagni, I. Chlamtac, and C. Petrioli**, "Configuring BlueStars: Multihop Scatternet Formation for Bluetooth Networks", *IEEE Transactions on Computers*, Vol. 62, No. 6, June 2003.

80. **X. W. Chu, B. Li, and I. Chlamtac**, "Wavelength Converter Placement under Different RWA Algorithms in Wavelength-Routed All-Optical Networks ", *IEEE Transactions on Communications*, Vol. 51, No. 4, April 2003.
81. **Y. Bing, I. Chlamtac, and H. C. Yu**, " Mobile Number Portability ", *IEEE Network Magazine*, 17(5), 2003.
82. **P. Lin, Y. Bing Lin, and I. Chlamtac**, " Modeling Frame Synchronization for UMTS High-Speed Downlink Packet Access ", *IEEE Transactions on Vehicular Technology*, Vol. 50, No. 1, January 2003.
83. **I. Chlamtac, M. Conti, and J. Liu**, "Mobile Ad Hoc Networking: Imperatives and Challenges", *Ad-Hoc Networks Journal*, Inaugural Issue, No. 1. Vol. 1, 2003.
84. **H. Zeng, Y. Fang and, I. Chlamtac**, "Call Blocking Performance Study from PCS Networks under More Realistic Mobility Assumptions," *Telecommunications Systems Journal*, (19:2), 2002.
85. **X. Luo, B. Li, I. Thng, Y. Bing Lin, and I. Chlamtac**, "An Adaptive Measured-based Pre-Assignment Scheme with Connection-level QoS Support for Mobile Networks", *IEEE Transactions on Wireless Communications*, Vol. 1, No. 3, July 2002.
86. **Y. Bing Lin, Pie-Chun Li, and I. Chlamtac**, "Dynamic Periodic Location Area Update in Mobile Networks ", *IEEE Transactions on Vehicular Technology*, Vol. 51, No. 6, 2002.
87. **Y. Bing Lin, Y. R. Huang, A. Pang, and I. Chlamtac**, "All-IP Approach for Third Generation Mobile Networks", *IEEE Network Magazine*, Vol. 16, No. 5, 2002.
88. **G. Zaruba, I. Chlamtac, and S. K. Das**, " A Prioritized Real-Time Wireless Call Degradation Framework for Optimal Call Mix Selection ", *ACM/Kluwer/SPIE Mobile Networks and Applications (MONET)*, Vol. 7, No. 2, April 2002.
89. **Y. Fang and I. Chlamtac**, "Analytical Generalized Results for Handoff Probability for Wireless Networks," *IEEE Transactions on Communications*, Vol. 50, March 2002.
90. **S. Basagni, I. Chlamtac, and V. Syrotiuk**, "Location Aware Multicast for Mobile Ad Hoc Networks," *Computer Networks*, Vol. 36, No. 5-6, August 2001.
91. **Y. Bing Lin, Y. R. Huang, Y. K. Chen, and I. Chlamtac**, "Mobility Management: From GPRS to UMTS", *Journal of Wireless Communications and Mobile Computing*, Vol. 1, No. 4, 2001.
92. **N. Bartolini and I. Chlamtac**, "Improving Call Admissions Control Procedures by Using Handoff Rate Information", *Journal of Wireless Communications and Mobile Computing*, Vol. 1, No. 3, 2001.
93. **Y. Bing Lin, H. Rao, and I. Chlamtac**, "General Packet Radio Service (GPRS): Architecture, Interfaces, and Deployment", *Journal of Wireless Communications and Mobile Computing*, Inaugural Issue, Vol. 1, No. 1, 2001.
94. **I. Chlamtac, A. Fumagalli, and C. J. Suh**, "Multi-Buffer Delay Line Architectures for Efficient Contention Resolution in Optical Switching Nodes", *IEEE Transactions on Communications*, Vol. 48, No. 12, December 2000.
95. **A. Fumagalli, J. Cai, and I. Chlamtac**, " The Multi-Token Inter-Arrival Time (MTIT) Access Protocol for Supporting Variable Size Packets over WDM Ring Network', *IEEE Journal on Selected Areas in Communications*, Vol. 18, No. 10, October 2000.

96. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, “ Portable Movement Modeling for PCS Networks”, *IEEE Transactions on Vehicular Technology*, Vol. 49, No. 4, July 2000.
97. **Y. Fang, I. Chlamtac, and H. Fei**, “Analytical Results for Optimal Choice of Location Update Interval for Mobility Database Failure Restoration in PCS networks,” *IEEE Transactions on Parallel and Distributed Systems*, Vol. 11, No. 6, June 2000.
98. **Y. Fang, I. Chlamtac, and H. B. Fei**, “ Failure Recovery of HLR Mobility Databases and Parameter Optimization for PCS Networks”, *Journal on Parallel and Distributed Computing*, Special Issue on Wireless Mobile Computing and Communication, Vol. 60, April 2000.
99. **I. Chlamtac, et.al.**, “ An Overview of the University of Texas at Dallas Center for Advanced Telecommunications Systems and Services (CATSS)”, *Mobile Computing and Communications Reports (MC2R)*, (Invited Overview Article). Vol. 4, No. 2, April 2000.
100. **I. Chlamtac, A. Fumagalli, and E.W.M. Wong**, “ Transmitter Vs. Receiver SDL Solutions for Contention Resolution in WDM Ring Networks”, *European Transactions on Telecommunications (ETT)*, Special Issue on WDM Networks, Vol. 11, No. 1, January/February 2000.
101. **S. Basagni, D. Bruschi, and I. Chlamtac**, “ A Mobility Transparent, Deterministic Broadcast Mechanism for Ad Hoc Networks”, *IEEE/ACM Transactions on Networking*, Vol. 7, No. 6, December 1999.
102. **I. Chlamtac, A. Fumagalli, and G. Wedzinga**, “Slot Routing as a Solution for Optically Transparent Scalable WDM Wide Area Networks”, *Photonic Networks Journal*, Vol. 1, No. 1, November 1999.
103. **Y. Fang, and I. Chlamtac**, “ Teletraffic Analysis and Mobility Modeling for PCS Networks”, *IEEE Transactions on Communications*, Vol. 47, No. 7, July 1999.
104. **I. Chlamtac and A. Farago**, “ A New Approach to the Design and Analysis of Peer-to-Peer Mobile Networks”, *ACM/Kluwer/SPIE Wireless Networks*, Vol. 5, No. 3, July 1999.
105. **Y. Bing Lin and I. Chlamtac**, “Effects of Erlang Call Holding Times on PCS Call Completion”, *IEEE Transactions on Vehicular Technology*, Vol. 48, No. 3, April 1999.
106. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, “Billing Strategies and Performance Analysis for PCS Networks,” *IEEE Transactions on Vehicular Technology*, Vol. 48, No. 2, March 1999.
107. **I. Chlamtac, V. Elek, A. Fumagalli, and C. Szabo**, “Scalable WDM Network Architecture Based on Photonic Slot Routing”, *IEEE/ACM Transactions on Networking*, Vol. 7, No. 1. February 1999.
108. **I. Chlamtac, C. Petrioli, and J. Redi**, “Energy-Conserving Access Protocols for Identification Networks”, *IEEE/ACM Transactions on Networking*, Vol. 7, No. 1, February 1999.
109. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, “ Channel Occupancy Times and Handoff Rate for Mobile Computing and PCS Networks”, *IEEE Transactions on Computers*, Vol. 47, No. 6, 1998.
110. **P. Bahl, I. Chlamtac, and A. Farago**, “Resource Assignment For Integrated Services in Wireless ATM Networks”, *International Journal of Communication Systems*, Special issue on Personal Communication Systems, John Wiley & Sons, (April 1998).
111. **I. Chlamtac, B. Kashnabish, and Y. Bing Lin**, “ Wireless Segment for Enterprise Networking”, *IEEE Network Magazine*, Vol. 12, No. 4, July/August 1998.

112. **I. Chlamtac, A. Farago, A. Fumagalli, and H. Zhang**, "A Deterministic Approach to the End-to-End Analysis of Packet Flows in Connection Oriented Networks", *IEEE/ACM Transactions on Networking*, Vol. 6, No. 4, August 1998.
113. **T. Liu, P. Bahl, and I. Chlamtac**, "Mobility Modeling, Location Tracking and Trajectory Prediction in Wireless ATM Networks", *IEEE Journal on Selected Areas in Communications*, Vol. 16, No. 6, August 1998.
114. **I. Chlamtac, V. Elek, and A. Fumagalli**, "A Fair Slot Routing Solution for Scalability in All-Optical Packet Switched Networks", *Journal on High Speed Networks*, Vol. 6, No. 3, 1997.
115. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, "Modeling PCS Networks Under General Call Holding Time and Cell Residence Time Distributions", *IEEE/ACM Transactions on Networking*, Vol. 5, No. 6, December, 1997.
116. **I. Chlamtac, A. Farago, and H. Zhang**, "Time Spread Multiple Access (TSMA) Protocols for Multihop Mobile Radio Networks", *IEEE/ACM Transactions on Networking*, Vol. 5, Number 6, 1997.
117. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, "Call Performance for a PCS Network", *IEEE Journal on Selected Areas in Communications*, Vol. 15, No. 8, October 1997.
118. **Y. Bing Lin and I. Chlamtac**, "A Model with Generalized Holding and Cell Residence Times for Evaluating Handoff Rates and Channel Occupancy Times in PCS Networks", *Intl. J. Wireless Info. Networks*, 4(3), 1997.
119. **I. Chlamtac, M. G. Kienzle, and C. Szabo**, "Characterizing the Behavior of High-Speed Interconnection Systems with Distributed Control", *Telecommunications Systems Journal*, Vol. 6, No. 2, October, 1996.
120. **Y. Bing Lin and I. Chlamtac**, "Heterogeneous Personal Communications Services", *IEEE Communications Magazine*, September 1996.
121. **I. Chlamtac and M. G. Kienzle**, "Differential Service in High Speed Interconnection Systems: An Algorithm for Prioritized Access", *IEEE Transactions on Communications*, Vol. 44, No. 7, July 1996.
122. **I. Chlamtac, A. Fumagalli, L.G. Kazovsky, P. Melman, W.H. Nelson, P. Poggiolini, M. Cerisola, A. Choudhury, T.K. Fong, R.T. Hofmeister, C.L. Lu, A. Mekittikul, D.J. Sabido, C. J. Suh, and E.W.M. Wong**, "CORD: Contention Resolution by Delay Lines", *IEEE Journal on Selected Areas in Communications, jointly with IEEE/OSA Journal of Lightwave Technology*, Vol. 14, No. 5, June 1996.
123. **I. Chlamtac, A. Farago, and T. Zhang**, "Lightpath (Wavelength) Routing in Large WDM Networks", *IEEE Journal on Selected Areas in Communications jointly with IEEE/OSA Journal of Lightwave Technology*, Vol. 14, No. 5, June 1996.
124. **I. Chlamtac, A. Ganz, and M. Kienzle**, "A Performance Model of a Connection Based Hypercube Interconnection System", *The International Journal on Performance Evaluation*, Vol. 25, No. 2, April 1996.
125. **I. Chlamtac and C. Ruszczyk**, "An Integrated Protocol Stack for Efficient Resources Management in Wireless Networks", "Special Issue on Routing in Broadband Networks", *Journal of Network and Systems Management*, Vol. 4, No. 2, 1996.
126. **I. Chlamtac, A. Fumagalli, L. G. Kazovsky, and P. T. Poggiolini**, "A Contention/Collision Free WDM Ring Network for Multi Gigabit Packet Switched Communication", *Journal on High Speed Networks*, Vol. 4, No. 2, 1995.

127. **I. Chlamtac, A. Farago, and H. Y. Ahn**, "A Topology Transparent Link Activation Protocol for Mobile CDMA Radio Networks", *IEEE Journal on Selected Areas in Communications*, Vol. 12, No. 8, October 1994.
128. **I. Chlamtac, A. Farago, and T. Zhang**, "Optimizing the System of Virtual Paths", *IEEE/ACM Transactions on Networking*, Vol. 2, No. 6, September 1994.
129. **I. Chlamtac and A. Fumagalli**, "QUADRO-Star: A High Performance Optical WDM Star Network", *IEEE Transactions on Communications*, Vol. 42, No. 8, August 1994.
130. **I. Chlamtac and A. Farago**, "An Optimal Channel Access Protocol with Multiple Reception Capacity", *IEEE Transactions on Computers*, Vol. 43, No. 4, April 1994.
131. **I. Chlamtac and A. Fumagalli**, "A Solution to Packet Switching in Optical Transmission Networks", *Computer Networks and ISDN Systems*, Vol. 26, No. 6-8, March 1994.
132. **I. Chlamtac and A. Farago**, "Making Transmission Schedules Immune to Topology Changes in Multi-Hop Packet Radio Networks", *IEEE/ACM Transactions on Networking*, Vol. 2, No. 1, February 1994.
133. **I. Chlamtac and A. Fumagalli**, "An Optical Switch Architecture for Manhattan Networks", *IEEE Journal on Selected Areas in Communications*, Vol. 11, No. 4, May 1993.
134. **I. Chlamtac and T. Zhang**, "A Counter Based Congestion (CBC) Control For ATM Networks", *Computer Networks and ISDN Systems*, 26, 1993.
135. **I. Chlamtac and A. Fumagalli**, "An Optical Data Double Ring Networks", *Journal on High Speed Networks*, Vol. 2, No. 4, 1993.
136. **I. Chlamtac, A. Ganz, and G. Karmi**, "Lightnets: Topologies for High Speed Optical Networks", *IEEE Journal on Lightwave Technologies*, Vol. 11, No. 5, May 1993.
137. **I. Chlamtac, A. Ganz, and M. Kienzle**, "An HIPPI Interconnection System", *IEEE Transactions on Computers*, Vol. 42, No. 2, February 1993.
138. **I. Chlamtac and M. Kienzle**, "Multitasking in High-speed Interconnection Systems", *Computer Networks and ISDN Systems*, Vol. 25, No. 6, January 1993.
139. **I. Chlamtac and M. Kienzle**, "Connection Management in High Speed Interconnection Systems", *Journal on High Speed Networks*, Vol. 1, No. 2, 1992.
140. **I. Chlamtac and K. G. Satam**, "ETS - A Performance Prediction Tool for Protocols Specified in FDT Estelle", in *The Microprocessing and Microprogramming Journal*, Vol. 35, September 1992.
141. **I. Chlamtac, A. Ganz, and G. Karmi**, "Lightpath Communications: A Novel Approach to High Bandwidth Optical WAN-s", *IEEE Transactions on Communications*, Vol. 40, No. 7, July 1992.
142. **A. Ganz and I. Chlamtac**, "Tractable Analytic Models of Demand Assignment Protocols in Networks with Arbitrary Buffer Capacity", *IEEE Transactions on Communications*, Vol. 40, No. 5, May 1992.
143. **I. Chlamtac, A. Ganz, and M. Kienzle**, "Control Policies for Interconnecting Distributed Systems via an HIPPI Switch", *The Microprocessing and Microprogramming Journal*, Vol. 32, August 1991.
144. **I. Chlamtac and O. Weinstein**, "The Wave Expansion Approach to Broadcasting in Multi-Hop Radio Networks", *IEEE Transactions on Communications*, Vol. 39, No. 3, March 1991.

145. **A. Ganz and I. Chlamtac**, "An Efficient Solution to Finite Buffer Non-Persistent Carrier Sense Multiple Access Protocol", *Computer Networks and ISDN Systems*, (18) 1990.
146. **I. Chlamtac, A. Ganz, and G. Karmi**, "Throughput and Delay in Multihop TDM Radio Networks", *INFOR*, Vol. 28, No. 3, August 1990.
147. **I. Chlamtac and A. Ganz**, "Toward Alternative High Speed Networks: The Swift Architecture", *IEEE Transactions on Communications*, Vol-COM. 38, No. 4, April 1990.
148. **A. Ganz and I. Chlamtac**, "A Linear Solution to Queuing Analysis of Synchronous Finite Buffer Systems", *IEEE Transactions on Communications*, Vol-COM. 38, No. 4, April 1990.
149. **I. Chlamtac and W. R. Franta**, "Rational, Directions and Issues Surrounding High Speed Computer Networks", *Proceedings of the IEEE*, January 1990.
150. **I. Chlamtac and A. Ganz**, "An Experimental Methodology for Integrated Services Systems", *Stochastic Models*, Vol. 5, No. 4, 1989.
151. **A. Ganz and I. Chlamtac**, "Path Allocation Access Control in Fiber-Optic Communication Systems", *IEEE Transactions on Computers*, Vol. C-38, No. 10, October 1989.
152. **I. Chlamtac, A. Ganz, and G. Karmi**, "Fast Circuit Switching in Fiber Optic Networks", *Computer Communication Review*, Vol. 18, No. 4, (Special Issue), September 1988.
153. **I. Chlamtac and A. Ganz**, "A Multi-Bus-Train Communication (AMTRAC) Architecture for High-Speed Fiber Optic Networks", *IEEE Journal on Selected Areas in Communications*, Vol. SAC-6, No. 7, July 1988.
154. **A. Ganz and I. Chlamtac**, "Queuing Analysis of Finite Buffer Token Networks", *Performance Evaluation Review*, (Special Issue), Vol. 16, No. 1, May 1988.
155. **I. Chlamtac and A. Ganz**, "Channel Allocation Protocols in Frequency-Time Controlled High Speed Networks", *IEEE Transactions on Communications*, Vol. COM-36, No. 4, April 1988.
156. **I. Chlamtac and O. Ganz**, "Design and Analysis of Very High Speed Network Architectures", *IEEE Transactions on Communications*, Vol. COM-36, No. 3, March 1988.
157. **I. Chlamtac, O. Ganz, and Z. Koren**, "Prioritized Demand Assignment Protocols and Their Evaluation", *IEEE Transactions on Communication*, Vol. COM-36, No. 2, February 1988.
158. **I. Chlamtac and S. Kutten**, "Tree Based Broadcasting in Multi-Hop Radio Networks", *IEEE Transactions on Computers*, Vol. C-36, No. 10, October 1987.
159. **I. Chlamtac and A. Herman**, "LAN-HUB: An Ethernet Compatible High Performance/Low Cost Communication", *Computer Communication Review*, Vol. 17, No. 5, (Special Issue), August 1987.
160. **I. Chlamtac and A. Lerner**, "Fair Algorithms for Maximal Link Allocation in Multi-Hop Radio Networks", *IEEE Transactions on Communications*, Vol. COM-35, No. 7, July 1987.
161. **I. Chlamtac and A. Ganz**, "Evaluation of the Random Token Protocol for High Speed and Radio Networks", *IEEE Journal on Selected Areas in Communications*, Vol. SAC-5, No. 6, July 1987.
162. **I. Chlamtac and S. Pinter**, "Distributed Nodes Organization Algorithm for Channel Access in a Multi-Hop Dynamic Radio Network", *IEEE Transactions on Computers*, Vol. C-36, No. 6, June 1987.



163. **I. Chlamtac and O. Ganz**, "Synchronous and Asynchronous Multi- Channel Models of HYPERchannel Local Networks", *IEEE Transactions on Computers*, Vol. C-36, No. 2, February 1987.
164. **I. Chlamtac**, "A Concurrent Network Simulator for Automated Protocol Development and Performance Evaluation", *The Microprocessing and Microprogramming Journal*, Vol. 18, December 1986.
165. **I. Chlamtac and O. Ganz**, "Performance of Multibeam Packet Satellite Systems with Conflict Free Scheduling", *IEEE Transactions on Communications*, Vol. COM-34, No. 10, October 1986.
166. **Z. Koren, I. Chlamtac, and O. Ganz**, "A Model For Evaluating Demand Assignment Protocols With Arbitrary Workloads", *Computer Communication Review*, Vol. 16, No. 3, (Special Issue), August 1986.
167. **I. Chlamtac and O. Ganz**, "High Speed (LAN) Communication by FDM/TDM Control", *Computer Communication Review*, Vol. 16, No. 3, (Special Issue), August 1986.
168. **I. Chlamtac and W. R. Franta**, "An Optimal Election Protocol for Channel Allocation", *Computer Networks*, Vol. 10, No. 5, December 1985.
169. **I. Chlamtac and S. Kutten**, "On Broadcasting in Radio Networks - Problem Analysis and Protocol Design", *IEEE Transactions on Communications*, Vol. COM-33, No. 12, December 1985.
170. **R. Jain and I. Chlamtac**, "Dynamic Computation of Median and Percentiles", *Communications of the ACM*, Vol. 28, No. 10, October 1985.
171. **I. Chlamtac and W. R. Franta**, "A Multi-Access Protocol for Multi-Hop Radio Networks", *IEEE Transactions on Communications*, Vol. COM-33, No. 10, October 1985.
172. **I. Chlamtac**, "An Ethernet Compatible Protocol for Real Time Voice/Data Integration", *Computer Networks*, Vol. 10, No. 2, September 1985.
173. **I. Chlamtac and O. Ganz**, "An Analytic Model of the HYPERchannel Network Using Multiple Channel Architectures", *Performance Evaluation Review*, Vol. 12, No. 2, (Special Issue), August 1985.
174. **I. Chlamtac**, "A Programmable VLSI Controller for Standard and Prioritized Ethernet Local Networks", accepted for publication in *Journal of Telecommunication Networks*, August 1985, published in book format (see Books).
175. **I. Chlamtac and M. Eisinger**, "Performance of Integrated Services (Voice/Data) CSMA-CD Networks", *Performance Evaluation Review*, Vol. 12, No. 2, (Special Issue), August 1985.
176. **I. Chlamtac and O. Ganz**, "A Study of Communication Interfaces for Multiple Bus Networks", *Computer Networks*, Vol. 9, No. 3, March 1985.
177. **O. Ganz and I. Chlamtac**, "Analysis of Multiple-Bus Synchronous and Asynchronous Communication Systems", *Performance Evaluation*, Vol. 5, February 1985.
178. **I. Chlamtac**, "ILAN - An Integrated Local Area Network Providing Voice and Data Service", accepted for publication in *IEEE Journal on Selected Areas in Communications*, May 1984.
179. **I. Chlamtac and R. Jain**, "Building a Simulation Model for Efficient Design and Performance Analysis of Local Area Networks", *Simulation*, Vol. 41, No. 2, February 1984.

180. **I. Chlamtac and M. Eisinger**, “Voice/Data Integration on Ethernet: Backoff and Priority Considerations”, *Computer Communications*, Vol. 6, No. 5, October 1983.
181. **I. Chlamtac and W. R. Franta**, “A Generalized Simulator for Computer Networks”, *Simulation*, Vol. 39, No. 4, October 1982.
182. **I. Chlamtac and W. R. Franta**, “A Message Based Priority Access to Local Networks”, *Computer Communications*, Vol. 3, No. 2, April 1980.
183. **I. Chlamtac, W. R. Franta, P. D. Patton and Bill Wells**, “Performance Issues in Back-End Storage Networks”, *Computer*, Vol. 13, No. 2, February 1980.
184. **I. Chlamtac and W. R. Franta**, “BRAM: The Broadcast Recognizing Access Method”, *IEEE Transactions on Communications*, Vol. COM-27, No. 8, August 1979.

**PARTIAL LIST OF ARTICLES IN REFEREED CONFERENCES AND  
INVITED PRESENTATIONS**

185. **S. Kandeepan, A. Sierra, J. Campos, and I. Chlamtac**, “Periodic Sensing in Cognitive Radios for Detecting UMTS/HSDPA Based on Experimental Spectral Occupancy Statistics”, *IEEE WCNC*, Sidney, Australia, April 2010.
186. **M. Chen, V. Leung, S. Mao, M. Li, and I. Chlamtac**, “Energy-efficient Itinerary Planning for Mobile Agents in Wireless Sensor Networks”, *IEEE ICC*, Dresden, Jun 2009.
187. **R. Riggio, Daniele Miorandi, and I. Chlamtac**, “Airtime Deficit Round Robin (ADRR) Packet Scheduling Algorithm”, *IEEE MeshTech*, Atlanta, Georgia, USA, October 2008.
188. **M. Li, Y. Xiao, H. Zhu, Chlamtac, and B. Prabhakaran**, “QOAR: Adaptive QoS Scheme in Multi-rate Wireless LANs”, *IEEE ICC*, Beijing, May 2008.
189. **M. Li, H. Zhu, Y. Xiao, I. Chlamtac, and B. Prabhakaran**, “Adaptive Frame Concatenation Mechanisms for QoS in Multi-rate Wireless Ad Hoc Networks”, *IEEE Infocom*, Phoenix, Arizona, April 2008.
190. **T. Kovacs and I. Chlamtac**, “Future Internet and the building a Global Society”, *EU NiHao Conference*, Beijing, November 2007.
191. **R. Riggio, F. De Pellegrini, N. Scalabrino, P. Li, Y. Fang, and I. Chlamtac**, “Performance of a Novel Adaptive Traffic Aggregation Scheme for Wireless Mesh Networks”, *IEEE Milcom*, Orlando, Florida, October 2007.
192. **T. Chen, H. Woesner, Y. Ye, and I. Chlamtac**, “WiGEE: A Hybrid Optical/Wireless Gigabit WLAN”, *IEEE Globecom*, Washington, DC, November 2007.
193. **N. Scalabrino, P. Li, Y. Fang, E. Gregori, and I. Chlamtac**, “Channel Interference in IEEE 802.11b Systems”, *IEEE Globecom*, Washington, DC, November 2007.
194. **X. Zhou, H. Zhang, T. Chen, G. M. Maggio and I. Chlamtac**, “Distributed Transmit Power Control among Cooperative Relaying Nodes in Ultra-Wideband Cognitive Radio Networks”, *IEEE International Conference on Ultra-Wideband, ICUWB 2007*, Singapore, September 2007.
195. **T. Chen, H. Zhang, G. M. Maggio and I. Chlamtac**, “*CogMesh: A Cluster-Based Cognitive Radio Mesh Network*”, *IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks*, IEEE Dyspan, Dublin, Ireland, August 2007.

196. **M. Li, B. Prabhakaran, I. Chlamtac, F. De Pellegrini, and A. Alvarez**, “*ROBO-TRAK: A Centralized Real-time Monitoring, Control, and Coordination System for Robot Swarms*”, ICST ROBOCOMM, July 2007.
197. **T. Chen, H. Woesner, and I. Chlamtac**, “*A Channel Aware Uplink Bandwidth Allocation Algorithm in Wireless Networks*”, IST Mobile and Wireless Communications Summit, Budapest, Hungary, July 2007.
198. **T. Chen, H. Zhang, G. Maggio, and I. Chlamtac**, “*Topology Management in CogMesh: A Cluster-Based Cognitive Radio Network*”, Cognets Workshop, IEEE ICC, Glasgow, Scotland, June 2007.
199. **D. Tacconi, I. Carreras, D. Miorandi, F. Chitti, R. Fantacci**, “*Supporting the Sink Mobility: A case Study for Wireless Sensor Networks*”, IEEE ICC, Glasgow, June 2007.
200. **F. De Pellegrini, D. Miorandi, I. Carreras, and I. Chlamtac**, “*A Graph-Based Model for Disconnected Ad Hoc Networks*”, IEEE Infocom, Anchorage, Alaska, May 2007.
201. **N. Scalabrino, F. De Pellegrini, R. Riggio, A. Maestrini, C. Costa, and I. Chlamtac**, “*Measuring the Quality of VoIP Traffic on a WiMAX Testbed*”, ICST TRIDENTCOM, Orlando, Florida, USA, May 2007.
202. **T. Chen and I. Chlamtac**, “*A Downlink Scheduling Scheme with Link Layer Channel Estimation in Wireless Networks*”, RAWNET Workshop, WiOpt, Lymasol, Cyprus, April 2007.
203. **D. Miorandi, I. Carreras, E. Altman, L. Yamamoto, and I. Chlamtac**, “*Bio-Inspired Approaches for Autonomic Pervasive Computing Systems*”, Biowire 2007, A Workshop on Bioinspired Design of Networks, University of Cambridge, Cambridge England, April 2007.
204. **D. Tacconi, H. Woesner, I. Chlamtac, C. Xie, S. Randel**, “*Evaluation of Diversity Techniques for Indoor Diffuse Infrared Channel*”, IEEE WCNC, Hong Kong, March 2007.
205. **N. Scalabrino, A. Ghittino, S. Pera, and I. Chlamtac**, “*Performance Evaluation of a WiMax Testbed under VoIP Traffic*”, ACM Wintech, Los Angeles, September 2006.
206. **T. Chen, H. Zhang, and I. Chlamtac**, “*High Speed Orthogonal Waveform Based Indoor Wireless Transmission by UWB and 60 GHz Dual Band System*”, 3rd IEEE International Symposium on Wireless Communication Systems (ISWCS200), Valencia, Spain, September 2006.
207. **Y. Yabin, H. Woesner, and I. Chlamtac**, “*Traffic Grooming Techniques in Optical Networks*”, IEEE/Create-Net Broadnets, San Jose, October 2006.
208. **I. Carreras, D. Miorandi, and I. Chlamtac**, “*A Framework for Opportunistic Forwarding in Disconnected Networks*”, IEEE/Create-Net Mobiquitous, San Jose, August 2006.
209. **X. Zhou, H. Zhang, and I. Chlamtac**, “*Transmit Power Allocation among PSWF-based Pulse Wavelets in Cognitive UWB Radio*”, First International Conference on Cognitive Radio Oriented Wireless Networks and Communications (CrownCom 2006), Mykonos Island, Greece, June 2006.
210. **Y. Yabin, H. Woesner, and I. Chlamtac**, “*Waveband Switching in Light Trail Networks*”, ONDM, 10th Conference on Optical Network Design and Modelling, Copenhagen, May 2006.
211. **R. Riggio, N. Scalabrino, D. Miorandi, G. Iacovoni, I. Chlamtac, and E. Gregori**, “*Performance Measurements of Multimedia Flows over a WiFi-based Mesh Network*”, 1st Workshop on multiMedia Applications over Wireless Networks, MediaWiN 2006, Athens, Greece, April 2006.

212. **Y. Ye, H. Woesner, R. Grasso, T. Chen, and I. Chlamtac**, "Traffic Grooming in Light Trail Networks", *IEEE Globecom, St. Louis, MO, December 2005*.
213. **D. Kliazovich, F. Granelli, H. Woesner, and I. Chlamtac**, "Bi-Directional Light-Trails for Synchronous Communications in WDM Networks", *IEEE Globecom, St. Louis, MO, December 2005*.
214. **D. Kliazovich, F. Granelli, H. Woesner, and I. Chlamtac**, "Bi-Directional Light-Trails for Synchronou Communications in WDM Networks", *IEEE Globecom, St. Louis, MO, December 2005*.
215. **T. Chen, H. Woesner, Y. Yabin, and I. Chlamtac**, "Wireless Gigabit Ethernet Extension", *The 2nd Annual IEEE/Create-Net Broadnets, Boston, October 2005*.
216. **X. Zhou, H. Zhang, and I. Chlamtac**, "Space-Frequency Coded Cooperative Scheme among Distributed Nodes in Cognitive UWB Radio", *The 16th Annual IEEE International Symposium on Personal Indoor and Mobile Radio Communications, (PIMRC), Berlin, September 2005*.
217. **X. Zhou, K. Yazdandoost, H. Zhang, and I. Chlamtac**, "Cognoscente: Spectrum Adaptation and Evolution in Cognitive Ultra-Wideband Radio", *IEEE International Conference on Ultra-Wideband (ICE), Zurich, September 2005*.
218. **Y. Yabin, H. Woesner, and I. Chlamtac**, "OTC Light-trail Networks", *7th IEEE International Conference on Transparent Optical Networks, ICON 2005, Barcelona, Spain, July 2005*.
219. **I. Carreras, F. De Pellegrini, D. Miorandi, and I. Chlamtac**, "Information Diffusion in a 2-Tier Wireless Sensor Network", *Sensoriums Workshop at IEEE/Create-Net WICON, Budapest Hungary, June 2005*.
220. **I. Carreras, I. Chlamtac, H. Woesner, H. Zhang**, "Nomadic Sensor Networks", *2nd European Workshop on Wireless Sensor Networks (WENS), Istanbul, Turkey, January 2005*.
221. **G. Zaruba, M. Huber, F. Kamangar, and I. Chlamtac**, "Monte Carlo Sampling Based In-Home Location Tracking With Minimal RF Infrastructure Requirements", *IEEE Globecom 2004 - Wireless Communications, Networks, and Systems, Dallas, November 2004*.
222. **H. Zhu, Y. Misic, I. Chlamtac, and Y. K. Tang**, "An On-line Hot-spot Detection Scheme in DS-CDMA Networks - Single Traffic Type", *IEEE Globecom 2004 - Wireless Communications, Networks, and Systems, Dallas, November 2004*.
223. **K. Lu, J. P. Jue, G. Xiao, and I. Chlamtac**, "Blocking Analysis of Multifiber Wavelength-Routed Networks", *IEEE Globecom 2004 - Wireless Communications, Networks, and Systems, Dallas, November 2004*.
224. **B. Prabhakaran, I. Chlamtac, H. Zhu, and S. Sathyamurthy**, "End-to-end Framework for QoS Guarantee in Heterogeneous Wired-cum-Wireless Networks", *The First International Conference on Quality of Service in Wired/Wireless High-Speed Networks (QSHINE), Dallas, October 2004*.
225. **N. Bartolini, E. Casalicchio, and I. Chlamtac**, "Session Based Access Control in Content Delivery Networks in Presence of Congestion", *The First International Conference on Quality of Service in Wired/Wireless High-Speed Networks (QSHINE), Dallas, October 2004*.
226. **H. Zhu and I. Chlamtac**, "Conditional Replenishment Based Multi-Path Transport and Rate Control for Video Streaming in Ad Hoc Networks", *International Conference on Distributed Multimedia Systems (DMS'2004), San Francisco Bay, September, 2004*.

227. **G. Zeng, K. Lu, and I. Chlamtac**, "A Finite Queueing Network Model for Burst Assembler in OBS Networks", *The 2004 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS)*, San Jose, CA, July 2004.
228. **Y.-K. Tang, J. Miic, H. Zhu, and I. Chlamtac**, "A Non-Uniform Traffic Detection Scheme in DS-CDMA Networks -Case of Single Traffic Type", *The 2004 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS)*, San Jose, CA, July 2004.
229. **A. Gumaste, I. Chlamtac, and J. Jue**, "Light-frames: A Pragmatic Model for Packet Transport at the Optical Layer", *IEEE ICC*, Paris, France, June 2004
230. **I. Chlamtac, G. Zeng**, "A Finite Queueing Model for IEEE 802.11 MAC Protocol", *IEEE VTC*, Milan, Italy, May 2004.
231. **I. Chlamtac, A. Gumaste, and G. Kuper**, "Optimizing Light-trail Assignment to WDM Networks for Dynamic IP Centric Traffic", *13th IEEE Workshop on Local and Metropolitan Area Networks*, Mill Valley, CA, April 2004.
232. **C. Szabo, I. Chlamtac, and E. Bedo**, "Design Considerations for Broadband Community Networks", E-Gov Services Minitrack in the Emerging Technologies Track of the *Thirty-Seventh Hawaii International Conference on System Sciences, HICSS-37*, Hawaii, January 2004.
233. **G. Zaruba and I. Chlamtac**, "Accelerating Bluetooth Inquiry for Personal Area Networks", *IEEE Global Communications Conference, Globecom*, San Francisco, December 2003.
234. **A. Gumaste and I. Chlamtac**, "Distributed Protection Scheme for WDM Mesh Networks", *Second International Conference on Optical Communications and Networks, ICOCN 2003*, Bangalore, India, October 2003.
235. **K. Lu, J. P. Jue, G. Xiao, I. Chlamtac, and T. Ozugur**, "A Distributed Signaling Scheme for Provisioning Dynamic Traffic in Wavelength-Routed Networks", *OptiComm 2003*, Dallas, TX, October, 2003.
236. **H. Zhu, I. Chlamtac, and G. Zeng**, "Dynamic Buffer Management for Multimedia Synchronization in Heterogeneous Networks," *1st International Workshop on Community Networks and FTTH/P/x*, Dallas, October 2003.
237. **G. Zeng, I. Chlamtac, and H. Zhu**, "Performance Modeling of Disks in Storage Area Networks," *1st International Workshop for SAN*, Dallas, October 2003.
238. **H. Zhu, H. Wang, I. Chlamtac, and B. Chen**, "Bandwidth Scalable Source-Channel Coding for Streaming Video over Wireless Access Networks", *1st Annual Wireless Networking Symposium (WNCG)*, Austin, TX, October 2003.
239. **G. Zeng, H. Zhu, and I. Chlamtac**, "A Novel Queueing Model for IEEE 802.11 WLANs", *1st Annual Wireless Networking Symposium (WNCG)*, Austin, TX, October 2003.
240. **H. Zhu and I. Chlamtac**, "An Analytical Model for IEEE802.11e EDCF Differential Services", *IEEE ICCCN*, Dallas, October 2003.
241. **H. Zhu, I. Chlamtac, J. Cobb, and G. Zeng**, "Modeling and Evaluation Analysis Based on a New Channel Assignment in Cellular Networks" *IEEE VTC*, October 2003.
242. **G. Zeng, I. Chlamtac, and A. Gumaste**, "Analysis of Burst Loss Probability in Optical Burst Switching Networks", *First International Workshop on Burst Switching, OptiComm 2003*, Dallas, October 2003.

243. **H. Zhu and I. Chlamtac**, "An Analytical Model for IEEE 802.11e EDCF Differential Services", *IEEE ICCCN3*, Dallas, October 2003.
244. **I. Chlamtac, A. Gumaste, and G. Zeng**, "Distributed Protection of Lightpaths in a Failed WDM link for Mesh Networks", *IEEE ICCCN3*, Dallas, October 2003.
245. **Z. Hua, G. Zeng, and I. Chlamtac**, "SMART: A Synchronization Scheme for Providing Multimedia Quality in Emerging Wireless Internet", *IEEE Vehicular Technology (VTC)*, Orlando, October 2003.
246. **G. Zeng and I. Chlamtac**, "Computational Aspects of Blocking Probability in Cellular Networks", *WNCG Wireless Networking Symposium*, Austin, Texas, October, 2003.
247. **Z. Hua, G. Zeng, and I. Chlamtac**, "Bandwidth Scalable Source-Channel Coding For Streaming Video over Wireless Access Networks", *WNCG Wireless Networking Symposium*, Austin, Texas, October, 2003.
248. **A. Gumaste and I. Chlamtac**, "Providing Bandwidth on Demand to End-users by Adaptations to a GMPLS Framework", *The 19th NFOEC*, Orlando Florida, September 2003.
249. **G. Zeng, I. Chlamtac Y. Fang, and Y. Wu**, "Modeling and Analysis for the Continuous-time Finite Queueing System M/M/1/L/c", *The 2003 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS)*, Montreal, Canada, July 2003.
250. **H. Zeng and I. Chlamtac**, "Mobility's Effect on Wireless Data Blocking Performance", *7th World Multiconference on Systemics, Cybernetics and Informatics (SCI)*, Orlando, July 2003.
251. **A. Gumaste and I. Chlamtac**, "Light-trails: A Novel Conceptual Framework for Conducting Optical Communications", *IEEE Workshop on High Performance Switching and Routing (HPSR 2003)*, Turin, Italy, June 2003.
252. **H. Zhu, G. Zeng, and I. Chlamtac**, "Control Scheme Analysis for Multimedia Inter- and Intra-stream Synchronization," *IEEE International Conference on Communications (ICC)*, Anchorage, Alaska, May 2003.
253. **K. Lu, J. P. Jue, T. Ozugur, G. Xiao, and I. Chlamtac**, "Lightpath Segmentation: A New Signaling Scheme for Wavelength-Routed Networks with Sparse Conversion", *IEEE International Conference on Communications (ICC)*, Anchorage, Alaska, May 2003.
254. **A. Gumaste and I. Chlamtac**, "A Protocol to Implement Ethernet Over PON", *IEEE International Conference on Communications (ICC)*, Anchorage, Alaska, May 2003.
255. **J. C. Liu, B. Li, Y. T. Hou, and I. Chlamtac**, "Dynamic Layering for Multi-Session Video Broadcasting with General Utility Functions", *IEEE INFOCOM*, San Francisco, CA, April 2003.
256. **K. Liu, G. Xiao, and I. Chlamtac**, "Behavior of Distributed Wavelength Provisioning in Wavelength-Routed Networks with Partial Wavelength Conversion", *IEEE INFOCOM*, San Francisco, CA, April 2003.
257. **A. Gumaste and I. Chlamtac**, "An Efficient Protocol for IP centric Communication using EPON", *ONDM 2003, The 7th IFIP Working Conference on Optical Network Design and Modeling*, Budapest, Hungary, February 2003.
258. **A. Gumaste and I. Chlamtac**, "Solving QoS issues in Optical Networks: The Light-trails approach", *QoS IP, 2nd International Workshop on QOS in MultiService IP Networks*, Milan, Italy, February 2003.

259. **A. Gumaste and I. Chlamtac**, “Bandwidth Management for Community Networks”, *IWDC*, Calcutta, India, December 2002.
260. **P. Lin, Y. Bing Lin, and I. Chlamtac**, “Overflow Control for UMTS High-Speed Downlink Packet Access”, *IEEE GLOBECOM*, Taiwan, November 2002.
261. **M. Zhou and I. Chlamtac**, “Optimizing All-Optical Network Designs”, *IEEE ETTC, IEEE Emergent Telecommunication Technology Conference*, Dallas, September, 2002.
262. **N. Bartolini and I. Chlamtac**, “Call Admission Control in Wireless Multimedia Networks”, *IEEE 13th International Symposium on Personal, Indoors, and Mobile Radio Communications (PIMRC)*, Lisboa, Portugal, September 2002.
263. **H.L. Wu, B. Li, L.Z. Li, L. Yin, I. Chlamtac, and B. Li**, “On Handoff Performance for an Integrated Voice/Data Cellular Network,” *The 13th IEEE International Symposium on Personal Indoors, and Mobile Radio Communications (PIMRC)*, Lisboa, Portugal, September, 2002.
264. **J. Liu, B. Li, Y. T Hou, and I. Chlamtac**, “Channelized Partitioning Problem in Multi Rate Broadcasting over Bandwidth-Constrained Networks”, *IEEE 13th International Symposium on Personal, Indoors, and Mobile Radio Communications, PIMRC*, Portugal, September 2002.
265. **M. Zhou, I. Chlamtac, and T. Landolsi**, “Network Architectural Examinations Of Various Cross-Connect Switches”, *NFOEC*, Dallas, September, 2002.
266. **X. Chu, B. Li, and I. Chlamtac**, “On the Wavelength Converter Placement for Different RWA Algorithms in Wavelength-Routed All-Optical Networks”, *IEEE/SPIE OptiComm*, Boston, July 2002.
267. **X. Chen, S.Sun, X. Zhang, and I. Chlamtac**, “Architectural Design of Multi-Services Ethernet PONs for Business Customers’ Applications”, *IEEE and IEE 9th ICT 2002, The International Conference on Telecommunications 2002*, June 2002, Beijing, China.
268. **C.F. Chiasserini, I. Chlamtac, P. Monti, and A. Nucci**, “Optimal Energy Design of Wireless Ad Hoc Networks”, *Networking*, May 2002, Pisa, Italy.
269. **K. Lu, G. Xiao, and I. Chlamtac**, “Blocking Analysis of Dynamic Lightpath Establishment in Wavelength-Routed Networks”, *IEEE International Conference on Communications (ICC)*, New York, April 2002.
270. **M. Zhou and I. Chlamtac**, “Techniques and Methodologies for Metro Network Design”, *SPIE’s APOC 2001*, Beijing, November 2001.
271. **G. Zaruba, I. Chlamtac, and S. Basagni**, “Bluetrees-Scatternet Formation to Enable Bluetooth-Based Ad Hoc Networks,” *IEEE International Conference on Communications (ICC)*, Helsinki, June 2001.
272. **N. Bartolini and I. Chlamtac**, “Call Admission Control: Solution of a General Decision Model with State Related Handoff Rate”, *IEEE Wireless Communications and Networking Conference (WCNC)*, Chicago, September 2000.
273. **S. Basagni, I. Chlamtac, V. Syrotiuk, and R. Talebi**, “On-Demand Location Aware Multicast (OLAM) for Ad Hoc Networks”, *IEEE Wireless Communications and Networking Conference (WCNC)*, Chicago, September 2000.
274. **G. Zaruba, I. Chlamtac, and S. K. Das**, “An Integrated Admission-Degradation Framework for Optimizing Real-Time Call Mix in Wireless Cellular Networks”, BEST PAPER, *ACM International Workshop on Modeling Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2000)*, Boston, August 2000.

275. **I. Chlamtac, A.D. Myers, V.R. Syrotiuk, and G. Zaruba**, “ An Adaptive Medium Access Control (MAC) Protocol for Reliable Broadcast in Wireless Networks”, *IEEE International Conference on Communications (ICC)*, New Orleans, June 2000.
276. **I. Chlamtac, A. Farago, A. Meyers, A. V. R. Syrotiuk, and G. Zaruba**, ”A Performance Comparison of Hybrid and Conventional MAC Protocols for Wireless Networks”, *IEEE Vehicular Technology (VTC)*, Tokyo, Japan, May 2000.
277. **S. Basagni I. Chlamtac, and A. V. R. Syrotiuk**, “Location Aware One-to-Many Communication in Mobile Multi-hop Wireless Networks”, *IEEE Vehicular Technology (VTC)*, Tokyo, Japan, May 2000.
278. **Y. Fang, I. Chlamtac, and H. B. Fei**, “An Active Mobility Database Failure Recovery Scheme and Performance Analysis for PCS Networks”, *IEEE INFOCOM*, Israel, March 2000.
279. **I. Chlamtac, A. Fumagalli, D.Montgomery, R. Brooks, I. Cerutti, M. Tacca, and L. Valcarenghi**, “CATO: Trans-layer Dense Wavelength-division Multiplexing (DWDM) Network Optimization: the Clustering Approach for Large Network Design,” *OFC*, Baltimore, March 2000.
280. **S. Basagni I. Chlamtac A. Farago V. R. Syrotiuk, and R. Talebi**, “Route Selection in Mobile Multimedia Ad Hoc Networks”, *6rd International Workshop on Mobile Multimedia Communications*, November 1999.
281. **I. Chlamtac, A. Farago, A.D. Myers, V.R. Syrotiuk, and G. Zaruba**, “ ADAPT to Mobility ”, *IEEE Global Telecommunications Conference (GLOBECOM)*, Rio De Janeiro, Brazil, October 1999.
282. **I. Chlamtac, A. Fumagalli, G. Wedzinga, and J.B. Carruthers**, “Upgradable Photonic Slot Routing Networks to Cope with Increasing Capacity Demands” in ”All-Optical Networking 1999: Architecture, Control, and Management Issues”, BEST PAPER, *SPIE’s International Symposium Voice, Video, and Data Communications*, Boston, MA, USA, September 1999.
283. **I. Chlamtac, A. Fumagalli, D.Montgomery, R. Brooks, I. Cerutti, M. Tacca, and L. Valcarenghi**, “CATO: CAD Tool for design, simulation, and optimization of optical telecommunications networks”, ”All-Optical Networking 1999: Architecture, Control, and Management Issues”, *Proc. SPIE’s International Symposium Voice, Video, and Data Communications*, Boston, September 1999.
284. **I. Chlamtac, Y. Fang, and H. Zeng**, “ Call Blocking Analysis for PCS Networks under General Cell Residence Time”, *IEEE WCNC*, New Orleans, September 1999.
285. **H. Zeng and I. Chlamtac**, “ Handoff Traffic Distribution in Cellular Networks”, *IEEE WCNC*, New Orleans, September 1999.
286. **I. Chlamtac, T. Liu, and J. Carruthers**, “ Location Management for Efficient Bandwidth Allocation and Call Admission Control”, *IEEE WCNC*, New Orleans, September 1999.
287. **A. Fumagalli, I. Chlamtac , and J. Cai**, “The Multi-Token Inter-Arrival Time (MTIT) Access Protocol for Supporting IP over WDM Ring Network ”, *IEEE ICC*, Vancouver, B.C., Canada, June 1999.
288. **H. Zhang, I. Chlamtac, and A. Farago**, “ Efficient Load Balancing for UBR Traffic in ATM Networks ”, *IEEE ICC*, Vancouver, B.C., Canada, June 1999.
289. **J. Redi, C. Petrioli, and I. Chlamtac**, “An Asymmetric, Dynamic, Energy-conserving ARQ Protocol ”, *IEEE Vehicular Technology (VTC)*, Houston, Texas, May 1999.



290. **S. Basagni, I. Chlamtac, and V. Syrotiuk**, “ A Generalized ”Geographic Messaging in Wireless Ad Hoc Networks” , *IEEE Vehicular Technology (VTC)*, Houston, Texas, May 1999.
291. **I. Chlamtac and A. Farago**, “ Virtual Path Network Topology Optimization Using Random Graphs”, *IEEE INFOCOM*, New York, April 1999.
292. **Y. Fang and I. Chlamtac**, “ A New Mobility Model and its Application in the Channel Holding Time Characterization in PCS Networks”, *IEEE INFOCOM*, New York, April 1999.
293. **I. Chlamtac, A. Fumagalli, and R. Grasso**, ”A Scalable, Self-Adaptive and Distributed Fair Access Control for WDM Bus Network”, *ONDM'99*, Paris, France, February 1999.
294. **T. Liu, J. Carruthers, and I. Chlamtac**, “Mobility Tracking and Prediction for Wireless Infrared LANs”, *SPIE's International Symposium Voice, Video, and Data Communications*, Boston, MA, USA, November 1998.
295. **Y. Fang, I. Chlamtac, and H. B. Fei**, “ Optimal Location Update Scheme to Combat Database Failure in PCS Networks”, *IEEE GLOBECOM'98*, Sydney, Australia, November 1998.
296. **A. Fumagalli, J. Cai, and I. Chlamtac**, “ A Token Based Protocol for Integrated Packet and Circuit Switching in WDM Rings”, *IEEE GLOBECOM'98*, Sydney, Australia, November 1998.
297. **Y. Fang and I. Chlamtac**, “ Handoff Probability for PCS Networks ”, *IEEE International Conference on Universal Personal Communications (ICUPC)*, Florence, Italy, October 1998.
298. **I. Chlamtac, C. Petrioli, and J. Redi**, “ Energy-Conserving GBN ARQ Protocols for Wireless Data Networks”, *IEEE International Conference on Universal Personal Communications (ICUPC)*, Florence, Italy, October 1998.
299. **S. Basagni, I. Chlamtac, V. R. Syrotiuk, and B.A. Woodward**, “A Distance Routing Effect Algorithm for Mobility (DREAM),” in *Proceedings of the Fourth Annual ACM/IEEE International Conference on Mobile Computing and Networking, MobiC'98*, Dallas, TX, October 1998.
300. **Y. Fang and I. Chlamtac**, “ A General Formula for Handoff Rate in PCS Networks”, *IEEE 9th International Symposium on Personal, Indoors, and Mobile Radio Communications (PIMRC)*, Boston, September 1998.
301. **I. Chlamtac, C. Petrioli, and J. Redi**, “ Energy-Conserving Selective Repeat ARQ Protocols for Wireless Data Networks”, *IEEE 9th International Symposium on Personal, Indoors, and Mobile Radio Communications (PIMRC)*, Boston, September 1998.
302. **S. Basagni and I. Chlamtac**, “Broadcast in Peer-to-Peer Networks,” in *Proceedings of the Second European Parallel and Distributed Systems Conference (EURO-PDS'98)*, Vienna, Austria, July 1998.
303. **I. Chlamtac, A. Fumagalli, and G. Wedzinga**, “All-Optical Wide-Area Networks Employing Photonic Slot Routing with Fixed Slot Assignment Transmission”, *SYBEN'98 International Symposium on Broadband European Networks*, Zurich, May 1998.
304. **I. Chlamtac, V. Elek, and A. Fumagalli**, “Performance of Photonic Slot Routing Networks with Random Transmissions”, *Proceedings of the DIMACS Workshop on Multichannel Optical Networks: Theory and Practice*, Rutgers University, March 1998.
305. **V. Elek, A. Fumagalli, and I. Chlamtac**, “Slot Aggregation for Bandwidth Efficient Photonic Slot Routing in WDM Networks”, *2nd Working-Conference on Optical Network Design and Modeling*, Rome, February 1998.

306. **H. Zhang, I. Chlamtac and, A. Farago**, "Performance Analysis for Time-Spread Multiple Access (TSMA) Protocol in Multihop Wireless Networks", *IEEE International Performance, Computing, and Communications Conference (ICC)*, Phoenix, Arizona, February 1998.
307. **I. Chlamtac**, "Emerging Models for Mobile Communication Systems", *IFIP International Conference on the Performance and Management of Complex Communication Networks (PM-CCN)*, Tsukuba, Japan, November 1997.
308. **T. Liu, V. Bahl and, I. Chlamtac**, "A Hierarchical Position-Prediction Algorithm for Efficient Management of Resources in Cellular Networks", *IEEE GLOBECOM'97*, Phoenix, Arizona, November 1997.
309. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, "Modeling of Roaming for PCS Networks", *IEEE GLOBECOM'97*, Phoenix, Arizona, November 1997.
310. **I. Chlamtac, A. Fumagalli, and C. J. Suh**, Optimal  $2 \times 1$  Multi-stage Optical Packet Multiplexer, *IEEE GLOBECOM'97*, Phoenix, Arizona, November 1997.
311. **T. Liu, P. Bahl, and I. Chlamtac**, "Aggressive Handoff Management in Third Generation Integrated Cellular Networks", *SPIE International Symposium on Voice, Video and Data Communications*, Dallas, TX, November 1997.
312. **Y. Fang, I. Chlamtac, and A. Fumagalli**, "Performance Analysis for a Large-scale All-optical WDM Network", *SPIE International Symposium on Voice, Video and Data Communications*, Dallas, TX, November 1997.
313. **I. Chlamtac, M. J. Ciesielski, A. Fumagalli, C. Ruszczyk, and G. Wedzinga**, "Intelligent Simulation for Computer-Aided Design of Optical Networks", *SPIE International Symposium on Voice, Video and Data Communications*, Dallas, TX, November 1997.
314. **I. Chlamtac, C. Petrioli, and J. Redi**, "Extensions to the Pseudo-Random Class of Energy Conserving Access Protocols", *2nd IEEE International Workshop on Factory Communication Systems*, Barcelona, Spain, October 1997.
315. **Y. Fang, I. Chlamtac, and Y. Bing Lin**, "Call Completion Probability for PCS Networks", *IEEE International Conference on Universal Personal Communications (ICUPC)*, San Diego, CA, October 1997.
316. **T. Liu, V. Bahl, and I. Chlamtac**, "An Optimal Self-Learning Estimator for Predicting Inter-Cell User Trajectory in Wireless Radio Networks", *IEEE International Conference on Universal Personal Communications (ICUPC)*, San Diego, CA, October 1997.
317. **V. Bahl and I. Chlamtac**, "Adapting H.263 Video Codec for Real-Time Visual Communications Over Wireless Radio Networks", *IEEE International Conference on Universal Personal Communications (ICUPC)*, San Diego, CA, October 1997.
318. **S. Basagni, I. Chlamtac, and A. Farago**, "A Generalized Clustering Algorithm for Peer-to-Peer Networks", *The IPSS Workshop on Nomadic Computing, Workshop on Algorithmic Aspects of Communication*, (satellite workshop of ICALP 97) Bologna, Italy, July 1997.
319. **I. Chlamtac, C. Petrioli, and J. Redi**, "An Energy-Conserving Access Protocol for Wireless Communications", *The IEEE International Conference on Communications, ICC'97*, Montreal, Quebec, Canada, June 1997.
320. **P. Bahl, I. Chlamtac, A. Farago**, "Optimizing Resource Utilization in Wireless Multimedia Networks", *The IEEE International Conference on Communications (ICC)*, Montreal, Quebec, Canada, June 1997.

321. **I. Chlamtac**, "Personal and Ubiquitous", *The International Workshop on Mobile and Wireless Communications Networks*, Paris, France, May 1997.
322. **I. Chlamtac, V. Elek, A. Fumagalli, and C. Szabo**, "Scalable WDM Network Architecture Based on Photonic Slot Routing and Switched Delay Lines", *IEEE INFOCOM*, Kobe, Japan, April 1997.
323. **Y. Bing Lin and I. Chlamtac**, "Effects of Erlang Call Holding Times on PCS Call Completion", *IEEE INFOCOM*, Kobe, Japan, April 1997.
324. **I. Chlamtac, C. Petrioli, and J. Redi**, "Analysis of Energy-Conserving Access Protocols for Wireless Identification Networks," *5-rd International Conference on Telecommunication Systems*, Nashville, TN, March 1997.
325. **Y. Feng, I. Chlamtac and, Y. Bing Lin**, "A Strategy for Real-Time Billing Systems in PCS Networks", *5-rd International Conference on Telecommunication Systems*, Nashville, TN, March 1997.
326. **I. Chlamtac, A. Fumagalli, C. Ruszczyk, and G. Wedzinga**, "Intelligent Simulation for Computer Aided Design of Optical Networks", *Working Conference on Photonic Networks*, Vienna, Austria, February 1997.
327. **I. Chlamtac**, "Wireless Access", *International Zurich Seminars On Digital Communication*, Zurich, Switzerland, February 1997.
328. **I. Chlamtac, A. Farago and, H. Zhang**, "A Generalized TSMA Protocol with Service Guarantees in Mobile Multihop Networks", *IFIP-IEEE 2nd Personal Wireless Communications Conference*, Frankfurt, Germany, December 1996.
329. **I. Chlamtac, A. Farago, T. Henk, and G. Gordos**, "Optimizing Bandwidth Allocation in Cellular Networks", *IEEE Global Telecommunications Conference (GLOBECOM)*, London, England, November 1996.
330. **I. Chlamtac, A. Fumagalli, and C. J. Suh**, "Switching Multi-Buffer Delay Lines for Contention Resolution in All-Optical Deflection Networks", *IEEE Global Telecommunications Conference, GLOBECOM'96*, London, England, November 1996.
331. **I. Chlamtac, V. Elek and, A. Fumagalli**, "Improving Bandwidth Efficiency in Scalable WDM Networks with SDL Bridging", *7th Workshop on Very High Speed Networks*, Greenbelt, Maryland, November 1996.
332. **I. Chlamtac**, "Issues in Mobile Computing", Plenary Address, *The Seventh IEEE International Conference on Personal, Indoor, and Mobile Radio Communications (PIMRC'96)*, Taiwan, October 1996.
333. **Y. Bing Lin and I. Chlamtac**, "Effective Call Holding Times for a PCS Network", *The Seventh IEEE International Conference on Personal, Indoor, and Mobile Radio Communications (PIMRC'96)*, Taiwan, October 1996.
334. **I. Chlamtac, A. Farago, and H. Zhang**, "A New Criterion for Route Selection in Communication Networks with Delay Sensitive Traffic", *IEEE ICCCN, Fifth International Conference on Computer Communications and Networks*, Washington D.C., October 1996.
335. **I. Chlamtac, A. Farago, and T. Zhang**, "Efficient Routing of Lightpaths", *MILCOM'96, IEEE Conference on Military Communications*, McLean, VA, October 1996.
336. **I. Chlamtac, V. Elek, A. Fumagalli, and C. Szabo**, "Scalable Optical Network Based on Folded Bus Architecture", *EUROPTO The European Symposium on Advanced Networks and Services (EOS-SPIE)*, Berlin, Germany, October 1996.

337. **I. Chlamtac, A. Farago, and H. Zhang**, "A Fundamental Relationship Between Fairness and Optimum Throughput in TDMA Protocols", *IEEE International Conference on Universal Personal Communications, ICUPC*, Cambridge, MA, October 1996.
338. **V. Bahl and I. Chlamtac**, "Bandwidth Allocation in Wireless Networks for Multiresolution VBR Video Traffic", *The Eleventh IEEE Annual Workshop on Computer Communication*, Reston, Virginia, September 1996.
339. **I. Chlamtac and V. Bahl**, "Strategies for Transmission of Compressed Video over Error-Prone Radio Channels", *3rd International Workshop on Mobile Multimedia Communications*, Princeton, New Jersey, September 1996.
340. **I. Chlamtac, V. Elek, A. Fumagalli, and C. Szabo**, "Scalable WDM Packet Switching Networks Based on Fixed Slot Allocation", *8th IEEE Workshop on Local and Metropolitan Area Networks*, Berlin-Potsdam, Germany, August 1996.
341. **I. Chlamtac, A. Fumagalli, and C. J. Suh**, "Improving Performance of CORD: Contention Resolution by Fiber Delay Lines", *5th Open Workshop On High Speed Networks*, Paris, France, March 1996.
342. **I. Chlamtac, A. Fumagalli, and C.J. Suh**, "A Delay Line Receiver Architecture for All-Optical Networks", *IEEE INFOCOM*, San Francisco, CA, March 1996.
343. **I. Chlamtac, M. G. Kienzle, and C. Szabo**, "Efficient Prioritized Communication in Distributed Interconnection Systems", *Euromicro '95*, Como, Italy, September 1995.
344. **A. Farago and I. Chlamtac**, "Mobile Virtual Networking", *The XIV Conference of the European Association of Operational Research Societies, (EURO XIV)*, Jerusalem, Israel, July 1995.
345. **E. Wong, I. Chlamtac, and A. Fumagalli**, "Performance Evaluation of CROWNS: WDM Multi-Ring Topologies", *IEEE International Conference on Communications (ICC)*, May 1995.
346. **I. Chlamtac, M. G. Kienzle, and C. Szabo**, "Characterizing the Behavior of High-Speed Interconnection Systems with Distributed Control", *3-rd International Conference on Telecommunication Systems*, Nashville, TN, March 1995.
347. **I. Chlamtac, V. Elek, A. Fumagalli, and C. Szabo**, "A Scalable Optical Packet Switching Network Architecture", *7th IEEE Workshop on Local and Metropolitan Area Networks*, Marathon, Florida, March 1995.
348. **A. Fumagalli and I. Chlamtac**, "A Bridge for Packet Switched WDM Networks", *Ninth Annual Workshop on Computer Communications*, Hawk's Cay Resort, Duck Key, Marathon, Florida, October 1994.
349. **M. Cerisola, I. Chlamtac, A. Fumagalli, R. T. Hofmeister, L. G. Kazovsky, C. L. Lu, P. Melman, and P. T. Poggiolini**, "Ultra-Fast Clock Recovery and Subcarrier-Based Signaling Technique for Optical Packet Switched Networks", *Summer Topical Meeting on Optical Networks and Their Enabling Technologies IEEE-LEOS*, Lake Tahoe, CA, July 1994.
350. **C. Szabo and I. Chlamtac**, "ATM-like Transmission of Isochronous Traffic in FDDI and DQDB Networks", *6th IEEE Workshop on Local and Metropolitan Area Networks*, San Diego, CA, October 1993.
351. **I. Chlamtac**, "Interconnecting LAN-s for Real Time Traffic Applications", *First International Conference on LAN Interconnection*, Research Triangle Park, NC, October 1993.

352. **I. Chlamtac, A. Fumagalli, L. G. Kazovsky, and P. T. Poggiolini**, "PIPELINE Optical Packet Network", *ECOC*, Montreux, Switzerland, September 1993.
353. **I. Chlamtac, A. Fumagalli, L. G. Kazovsky, and P. T. Poggiolini**, "Performance Evaluation of a Multi-Gbits WDM Optical Packet Network with Physical Ring Topology and Multisubcarrier Header Encoding", *SPIE Conference on Multigigabit Fiber Communication Systems, The International Symposium on Optical Applied Science and Engineering*, San Diego, CA, July 1993.
354. **I. Chlamtac and A. Fumagalli**, "Toward Optical Packet Switched Network Architectures", *SPIE Conference on Multigigabit Fiber Communication Systems, The International Symposium on Optical Applied Science and Engineering*, San Diego, CA, July 1993.
355. **I. Chlamtac, A. Farago, and T. Zhang**, "How to Establish and Utilize Virtual Paths in ATM Networks", *IEEE International Conference on Communications (ICC)*, Geneva, Switzerland, May 1993.
356. **I. Chlamtac and A. Farago**, "Making Transmission Schedules Immune to Topology Changes in Multi-Hop Packet Radio Networks", *IEEE International Conference on Communications (ICC)*, Geneva, Switzerland, May 1993.
357. **I. Chlamtac and A. Farago**, "An Optimal CDMA Channel Access Protocol", *IEEE International Conference on Communications, ICC*, Geneva, Switzerland, May 1993.
358. **I. Chlamtac and E. W. M. Wong**, "Interconnecting Multiple Input and Output LANs over a High Speed Gateway", *IEEE International Conference on Communications, ICC*, Geneva, Switzerland, May 1993.
359. **I. Chlamtac and A. Fumagalli**, "CROWNS: All-Optical WDM Multi-Ring Topologies", *International Symposium on Fiber Optic Networks and Video Communications*, Berlin, FR Germany, April 1993.
360. **I. Chlamtac**, "Control and Performance of Optical LAN-s", *Conference on Telecommunication Systems Modeling and Analysis*, Nashville, TN, March 1993.
361. **I. Chlamtac, A. Ganz and, K. G. Satam**, "Congestion Free Routing in Multi-Hop Radio CDMA-TDMA Networks by Virtual Capacity Assignment", *MILCOM'92, IEEE Conference on Military Communications*, October 1992.
362. **A. Farago, I. Chlamtac and, H. Y. Ahn**, "Nearly Optimum Scheduling in CDMA Packet Radio Networks", *MILCOM'92, IEEE Conference on Military Communications*, October 1992.
363. **I. Chlamtac and A. Fumagalli**, "An Integrated Electro-Optical Approach to All-Optical WDM Ring Communication", *7th Annual Workshop on Computer Communications*, Hilton Head, South Carolina, October 1992.
364. **I. Chlamtac and K. G. Satam**, "ETS - A Performance Prediction Tool for Protocols Specified in FDT Estelle", *EUROMICRO*, Paris, September 1992.
365. **I. Chlamtac and E. Wong**, "Configuration and Control of Gateways", *IEEE SUPERCOMM-ICC*, Chicago, Illinois, June 1992.
366. **I. Chlamtac and A. Fumagalli**, "Performance of Reservation Based (QUADRO) WDM Star Networks", *IEEE INFOCOM*, Florence, Italy, May 1992.
367. **I. Chlamtac and A. Fumagalli**, "All Optical Double Ring Networks", *3rd Workshop on Very High Speed Networks*, Greenbelt, Maryland, March 1992.

368. **I. Chlamtac and A. Fumagalli**, “QUADRO-Star: High Performance Optical WDM Star Network”, *IEEE GLOBECOM*, Phoenix, Arizona, December 1991.
369. **I. Chlamtac and A. Fumagalli**, “Optical-Delay-Line Buffering in All Optical Networks”, *6th Annual Workshop on Computer Communications*, Monterey, California, October 1991.
370. **I. Chlamtac and M. Kienzle**, “Control Policies for Interconnecting Distributed Systems via an HIPPI Switch”, *EUROMICRO*, Vienna, Austria, September 1991.
371. **I. Chlamtac**, “Controlled Communication Architectures for Radio Networks”, *Tactical Networking Research Workshop*, Fort Monmouth, New Jersey, June 1991.
372. **I. Chlamtac, A. Ganz and, G. Karmi**, “Transport Optimization in Broadband Networks”, *IEEE INFOCOM*, Bal Harbour, FL, April 1991.
373. **I. Chlamtac and M. Kienzle**, “Multitasking in High-speed Interconnection Systems”, *2nd Workshop on Very High Speed Networks*, Greenbelt, Maryland, March 1991.
374. **I. Chlamtac, A. Ganz, and M. Kienzle**, “A Performance Model of a Connection Based Hypercube Interconnection System”, *Fifth International Conference on Modeling Techniques and Tools for Computer Performance Evaluation*, Turin, Italy, February 1991.
375. **I. Chlamtac, A. Ganz, and G. Karmi**, “Lightpath Routing in the Lightnet Architecture”, the Second IFIP WG6.1-WG6.4 *International Workshop on Protocols for High-Speed Networks*, Stanford, CA, November 1990.
376. **I. Chlamtac**, “Controlling Communication in Mobile Radio Networks”, *URSI Convention*, Prague, Czechoslovakia, September 1990.
377. **I. Chlamtac and A. Ganz**, “A Study of Communication Resource Allocation in a Distributed System”, *10th IEEE International Conference on Distributed Computing Systems (ICDCS)*, Paris, France, May 1990.
378. **I. Chlamtac, A. Ganz, and G. Karmi**, “Lightnet: Lightpath Based Solutions for Wide Bandwidth WAN-s”, *IEEE INFOCOM San Francisco*, June 1990.
379. **A. Ganz and I. Chlamtac**, “Integrated Optical-Electronic Switching for High Speed WDM Networks”, *4th IEEE Annual Workshop on Computer Communications*, Dana Point, CA, November 1989.
380. **I. Chlamtac**, “Bounded Delay Routing for Real Time Communication in Tactical Radio Networks”, *MILCOM’89, IEEE Military Communications Conference*, Boston, October 1989.
381. **A. Ganz and I. Chlamtac**, “A Linear Solution to Finite Buffer Non-Persistent Carrier Sense Multiple Access Protocol”, *ORSA-TIMS*, New York, October 1989.
382. **I. Chlamtac and A. Ganz**, “Design Alternatives of Asynchronous WDM Star Networks”, *ICC’89, IEEE International Conference on Communications*, Boston, June 1989.
383. **I. Chlamtac, A. Ganz, and G. Karmi**, “All Optical “Lightpath” Networks: Distributed Lightpath Management”, *IEEE International Workshop In Microelectronics and Photonics in Communications*, Cape Cod, Mass., June 1989.
384. **I. Chlamtac**, “Network Layer Protocols for Lightpath Networks”, *IFIP WG6.4 Workshop on Protocols for High-Speed Networks*, Zurich, Switzerland, May 1989.
385. **I. Chlamtac, A. Ganz, and G. Karmi**, “Purely Optical Networks for Terabit Communication”, *IEEE INFOCOM*, Waterloo, Canada, April 1989.

386. **I. Chlamtac and A. Ganz**, "Lightwave Local Area Network Architectures", *IEEE INFOCOM*, Waterloo, Canada, April 1989.
387. **A. Ganz and I. Chlamtac**, "A Linear Solution to Queuing Analysis of Finite Buffer Networks", *ORSA-TIMS National Meeting*, Denver, Colorado, October 1988.
388. **I. Chlamtac, A. Ganz, and G. Karmi**, "Fast Circuit Switching in Fiber Optic Networks", *ACM SIGCOMM '88*, Stanford, CA, August 1988.
389. **I. Chlamtac, A. Ganz, and G. Karmi**, "Throughput Maximization in Wide Area TDM Networks", *ICC'88, IEEE International Conference on Communications*, Philadelphia, PA, June 1988.
390. **A. Ganz and I. Chlamtac**, "Queuing Analysis of Finite Buffer Token Networks", *ACM SIGMETRICS*, Santa Fe, New Mexico, May 1988.
391. **I. Chlamtac**, "Novel Architectures for Very High Speed Systems", *Workshop on Multi-User Communication*, Budapest, Hungary, May 1988.
392. **A. Ganz and I. Chlamtac**, "Path Allocation Access Control in Fiber-Optic Communication Systems", *IEEE INFOCOM*, New Orleans, March 1988.
393. **A. Ganz and I. Chlamtac**, "Finite Buffer Queuing Model for P-Persistent CSMA-CD Protocol", *IEEE PERFORMANCE'87 and ACM SIGMETRICS*, Brussels, Belgium, December 1987.
394. **I. Chlamtac and Y. Mansour**, "Local Cycle Generation in Multihop Radio Networks", *MILCOM'87, IEEE Military Communications Conference*, Washington DC, October 1987.
395. **I. Chlamtac and O. Weinstein**, "Distributed 'Wave' Broadcasting in Mobile Multi-Hop Radio Networks", *IEEE International Conference on Distributed Computing Systems (ICDCS)*, Berlin, September 1987.
396. **I. Chlamtac, A. Ganz, and G. Karmi**, "Optimization of Collision Free Link Activation Protocols in Multi-Hop Radio Networks", *URSI Convention*, Tel Aviv, Israel, August 1987.
397. **I. Chlamtac and A. Herman**, "LAN-HUB: An Ethernet Compatible High Performance-Low Cost Communication", *ACM SIGCOMM, BEST PAPER*, Stowe, Vermont, August 1987.
398. **A. Ganz and I. Chlamtac**, "Finite Buffer Queuing Models for Single and Multiple Transmission Channel Access Protocols", *The 2nd International Workshop on Applied Mathematics and Performance-Reliability Models of Computer Communication Systems*, Rome, Italy, May 1987.
399. **I. Chlamtac and A. Ganz**, "A Best-Effort Demand Assignment Protocol", *The 15th Convention of Electrical and Electronics Engineers in Israel*, Tel Aviv, April 1987.
400. **I. Chlamtac and O. Weinstein**, "The Wave Expansion Approach to Broadcasting in Multi-Hop Radio Networks", *IEEE INFOCOM*, San Francisco, California, April 1987.
401. **I. Chlamtac and A. Ganz**, "Toward Alternative High Speed Networks: The Swift Architecture", *IEEE INFOCOM*, San Francisco, California, April 1987.
402. **I. Chlamtac**, "CONSIP-PC: A Tool for Design of Computer Network Architectures on a Microcomputer", *Summer Conference for Simulation (SCS)*, January 1987.
403. **I. Chlamtac and O. Ganz**, "Design and Analysis of Very High Speed Network Architectures", *IEEE GLOBECOM*, Houston, Texas, December 1986.

404. **I. Chlamtac and A. Elazar**, “Hierarchical Routing With Bounded Routing Error”, *Computer Networking Symposium*, Washington DC, November 1986.
405. **I. Chlamtac**, “A Concurrent Network Simulator for Automated Protocol Development”, *EUROMICRO*, Venice, Italy, September 1986.
406. **I. Chlamtac and J. Feldman**, “Topology-Dependent Fair Access to a Shared Resource”, *International Conference on Computer Communication (ICCC)*, Germany, September 1986.
407. **Z. Koren, I. Chlamtac, and O. Ganz**, “A Model For Evaluating Demand Assignment Protocols With Arbitrary Workloads”, *ACM SIGCOMM*, Stowe, Vermont, August 1986.
408. **I. Chlamtac and O. Ganz**, “High Speed (LAN) Communication by FDM-TDM Control”, *ACM SIGCOMM*, Stowe, Vermont, August 1986.
409. **I. Chlamtac**, “The  $Q^2$  Event Handling Algorithm”, *Summer Simulation Conference (SCS)*, Nevada, July 1986.
410. **I. Chlamtac and O. Ganz**, “An Optimal Hybrid Demand Access Protocol for Unrestricted Topology Broadcast Networks”, *IEEE INFOCOM*, Bar Harbour, Florida, April 1986.
411. **I. Chlamtac and A. Lerner**, “Link Allocation in Mobile Radio Networks with Noisy Channel”, *IEEE INFOCOM*, Bar Harbour, Florida, April 1986.
412. **I. Chlamtac**, “An Ethernet Compatible Protocol for Real-Time Applications Integrated Network”, *Advanced Seminar on Real-Time Local Area Networks*, sponsored by INRIA and The US Army European Research Office, Bandol, France, April 1986.
413. **I. Chlamtac and O. Ganz**, “On the Design and Analysis of Multi-User Multi-Channel Systems with Centralized Control”, *IEEE GLOBECOM*, New Orleans, December 1985.
414. **I. Chlamtac and A. Lerner**, “A Link Allocation Protocol for Mobile Multi-Hop Radio Networks”, *IEEE GLOBECOM*, New Orleans, December 1985.
415. **I. Chlamtac and O. Ganz**, “An Analytic Model of the HYPERchannel Network Using Multiple Channel Architecture”, *ACM SIGMETRICS*, Austin, TX, August 1985.
416. **I. Chlamtac and M. Eisinger**, “Performance of Integrated Services (Voice-Data) CSMA-CD Networks”, *ACM SIGMETRICS*, Austin, TX, August 1985.
417. **I. Chlamtac and E. Givelberg**, “A Versatile Prioritized-Standard Ethernet Simulator for System Configuration and Verification”, *International Computing Symposium 1985*, Florence, Italy, March 1985.
418. **M. Sidi, N. Schubert, and I. Chlamtac**, “Frame Optimization in an Integrated Voice-Data Link”, *The 14th Convention of Electrical and Electronics Engineers in Israel*, Tel Aviv, March 1985.
419. **I. Chlamtac and S. Kutten**, “A Spatial Reuse TDMA-FDMA for Mobile Multi-Hop Radio Networks”, *IEEE INFOCOM*, Washington DC, March 1985.
420. **I. Chlamtac**, “Exercising the Priority Mechanisms of the INTEL 82586 LAN (Ethernet) Component in Support of Applications”, *Computer Networking Symposium*, Washington DC, December 1984.
421. **I. Chlamtac and O. Ganz**, “A Study of Communication Interfaces for Multiple-Bus Networks”, *Local Computer Networks, LCN*, Minneapolis, MN, October 1984.
422. **I. Chlamtac and S. Kutten**, “An Efficient Broadcast Protocol Embedded in Multi-Hop Radio Networks”, *IEEE COMPCON*, San Francisco, September 1984.



423. **I. Chlamtac and O. Ganz**, "Communication Interface Design Considerations for High Availability Distributed Systems", *The 4th Jerusalem Conference on Information Technology (JCIT)*, May 1984.
424. **I. Chlamtac**, "Local Area Networks: Implementation Technologies", *The 14th Convention of Systems Analysts*, Tel Aviv, Israel, June 1983.
425. **I. Chlamtac and S. Kutten**, "On Broadcasting and Spatial Reuse in Radio Networks", *URSI Symposium on Computer Communication*, Tel Aviv, Israel, May 1983.
426. **I. Chlamtac and W. R. Franta**, "The Operational Performance of the Broadcast Recognizing Access Method in a Network with a Hidden Nodes", *IEEE International Communications Conference, ICC*, Colorado, June 1981.
427. **I. Chlamtac**, "Issues in Design and Measurement of Local Area Networks", *CMG XI International Conference*, Boston, December 1980.
428. **I. Chlamtac, W. R. Franta, P. C. Patton, and Bill Wells**, "Back-End Storage Networks", *COMPCON*, San Francisco, February 1980.
429. **I. Chlamtac and W. R. Franta**, "Aids to the Development of Network Simulators", *National Computer Conference, NCC*, New York, June 1979.