

**CALL FOR PAPERS**  
**IEEE Journal on Selected Areas in Communications**  
**High-speed Network Security –**  
**Architecture, Algorithms and Implementation**

While the recent proliferation of broadband wireline and wireless networking technologies have substantially increased the available network capacity and enabled a wide-range of feature-rich high-speed communication services, security remains a major concern. Large-scale, high-profile system exploits and network attacks have become common recurring events that increasingly threaten the proper functioning and continual success of the communication infrastructure and services. One key aspect of mitigating such increasing threats is to develop new security/defense architectures, systems, methodologies and algorithms which can scale together with the communications infrastructure in terms of operating speed, operational simplicity and manageability, etc. The aim of this issue is to bring together the work done by researchers and practitioners in understanding the theoretical, architectural, system and implementation issues related to all aspects of security in high-speed networks. We seek original, previously unpublished and completed contributions not currently under review by another journal. Areas of interest include but are not limited to the following topics related to high-speed network security:

- High-speed Intrusion Detection, Prevention (IDS/IPS) systems, and malicious behavior detection
- High-speed Distributed Denial of Service (DDoS) attacks, prevention and defense systems
- High-speed network monitoring, metering, traceback and pushback mechanisms
- High-speed firewall, packet filtering and cross-layer defense coordination
- Support of authentication, confidentiality, authorization, non-repudiation in high-speed networks
- Secure group communications/multicast
- Secure and scalable content-delivery networks
- Support for automated security policy configuration and realization
- Forensic methodologies for high-speed networks
- Automated attack characterization and containment in high-speed networks
- Testbeds for high-speed network security

Authors should follow the IEEE J-SAC manuscript format described in the Information for Authors at <http://www.argreenhouse.com/society/J-SAC/Guidelines/info.html>. There will be one round of reviews and acceptance will be limited to papers needing only moderate revisions. Prospective authors should submit a pdf version of their complete manuscript via email to [jsac2005@poly.edu](mailto:jsac2005@poly.edu) according to the following timetable:

Manuscript Submission:	<b>September 1, 2005</b>
Acceptance Notification:	February 1, 2006
Final Manuscript Due:	April 1, 2006
Publication:	4th Quarter 2006

**Guest Editors:**

Prof. H. Jonathan Chao  
Dept of ECE  
Polytechnic University  
5 Metrotech Center  
Brooklyn, NY 11201  
[chao@poly.edu](mailto:chao@poly.edu)

Dr. Wing Cheong Lau  
Qualcomm  
5775 Morehouse Drive  
San Diego,  
CA 92121  
[lau@qualcomm.com](mailto:lau@qualcomm.com)

Prof. Bin Liu  
Dep. of Computer Science  
and Technology  
Tsinghua University,  
Beijing, 100084, China  
[liub@mail.tsinghua.edu.cn](mailto:liub@mail.tsinghua.edu.cn)

Prof. Peter Reiher  
3564 Boelter Hall  
UCLA  
405 Hilgard Ave.  
Los Angeles, CA 90095  
[reiher@lever.cs.ucla.edu](mailto:reiher@lever.cs.ucla.edu)

Dr. Rajesh Talpade  
Information Assurance  
Telcordia Technologies  
1 Telcordia Dr  
Piscataway, NJ 08854  
[rrt@research.telcordia.com](mailto:rrt@research.telcordia.com)