



Report on the Distinguished Lecture Tours (DLTs)

Report on Distinguished Lecture Tours (DLTs) (Reported by IEEE Asia Pacific Regional Headquarters – as of **22 May 2013**)

We are delighted that 5 DLTs have been approved by IEEE ComSoc for the Asia Pacific region beginning of this year. There is another one DLT still in planning stage.

In this report, we continue the DLT summary reports for 2012 submitted by our distinguished lecturers and hosting chapters; follow by the details of approved DLTs for 2013.

2012 AP DLT #5: 18 – 24 November 2012

Lecturer: Koichi Asatani

Hosting Chapter	2012 Chapter Chairs
New Zealand North & South ComSoc Chapter	Nurul I Sarkar
New Zealand Central ComSoc Chapter	Paul Teal



The lecture topic of "Trends in NGN and its issues" was presented by Dr. Koichi Asatani at the following locations:-

- 1. New Zealand North and South, Auckland 19 November 2012 (Monday)
- 2. New Zealand North and South, Christchurch 21 November 2012 (Wednesday)
- 3. New Zealand Central, Wellington 22 November 2012 (Thursday)

Summary Report from New Zealand North & South ComSoc Chapter

AUT's School of Computing and Mathematical Sciences hosted IEEE Distinguished Lecturer (DL) Professor Koichi Asatani's talk on Monday 19 November this year. The talk on "Carrier-Grade Networks toward the Future - Next Generation Networks and Its Issues" generated a lot of interest among the wider university community. Despite of the busy time of the year, about 23 participants (15 IEEE and 8 non-IEEE members) from within and outside of AUT University attended the talk. While most of the participants are from Universities (both academic staff member and research students), we had a couple of Engineers and/or local industry participants.

Overall, the talk was well received by participants. Professor Asatani highlighted the global ICT development, broadband access technologies, architecture and characteristics of next generation networks (NGNs), standardization, release 1 service capabilities, and ITU-T Recommendations. There was an ample opportunity for discussion as well as networking before and after the talk. People have enjoyed

talking/networking during the refreshment and we took the opportunity for membership recruitment as well. However, the event was co-sponsored by IEEE ComSoc and IEEE NZ North section. Professor Asatani has also successfully delivered lectures in Christchurch and Wellington as part of his DL tour to NZ.



* Written by Prof. Nurul I Sarkar, Chapter Chair of New Zealand North & South ComSoc Chapter

2012 AP DLT #6: 14-18 October 2012

Lecturer: Marco Chiani

Hosting Chapter	2012 Chapter Chairs
Malaysia ComSoc Chapter	Sieh Kiong Tiong



Prof. Marco Chiani delivered his lectures at the following locations:-

1. Kuala Lumpur – 15 October 2012 (Monday)

Venue: International Islamic University of Malaysia (IIUM) Topic: Spectrum Sensing for Cognitive Radio: fundamental limits and multiple antenna based methods.

- 2. Pahang 16 October 2012 (Tuesday) Venue: Universiti Malaysia Pahang (UMP) Topic: Same as above.
- Putrajaya 17 October 2012 (Wednesday)
 Venue: Universiti Tenaga Nasional (UNITEN)
 Topic: Fundamentals and Advances in MIMO Communication Systems and Networks

Summary Report from Prof. Marco Chiani

I had the opportunity to serve as a Distinguished Lecturer for the IEEE Communications Society in a tour in Malaysia in October 2012. It was really a honor for me to meet so many people, colleagues and students, interested in wireless communication and willing to share information and ideas. My schedule was very tight but, fortunately, perfectly organized: I gave three talks in three days, in different locations in Malaysia.

I would like to thank Ewell Tan and the local organizers for their excellent efforts in coordinating the tour. I would also like to express my gratitude to all my hosts throughout Malaysia, who provided perfect and warm hospitality.

The lectures were quite well participated considering the dimension and the youth of some of the host universities, where the research is still in its infancy. The auditoriums were generally quite well attended, and the number of attendees was from around thirty - in one of the location of recent institution and where the research activity is just started – to about fifty in the more consolidated institution where I gave the last talk.

In this regard I believe that the IEEE is having a fundamental role in the growth of the area related to the scientific and technical aspects of communication engineering.

The lectures were oriented to last 2-2.5 hours, depending upon the background and interests of the audience; however, lecture times often exceeded those time limits with questions from the audience. During and after each talk there have been questions and discussions, always testifying a great enthusiasm and interest for orienting the research activity and for the evolution of wireless communication.

I had the feeling of a good potential, interest and enthusiasm from the young students and colleagues met during the tour, with the will to further improve the research activity in the communication area

There were many questions. Some of the more frequently asked and interesting questions were: what directions can be suggested for research in the area of wireless communication and cognitive radio? What is the role that wireless communication systems will play in the green economy? And etc...

I would like to mention again that it was a positive lecture tour and I met many IEEE volunteers, colleagues and students.

I would like to thank all persons involved in the organization of the tour.

2012 AP DLT #10: 20 September – 1 October 2012

Lecturer: Narayan Mandayam

Hosting Chapter	2012 Chapter Chairs
Bangalore ComSoc Chapter	Subir Saha
Pune ComSoc Chapter	Mandar Khurjekar
Hyderabad ComSoc Chapter	Deergha Rao Korrai



Prof. Narayan Mandayam gave his technical presentations at the following locations:-

Bangalore – 21st September 2012 (Friday) Topic: Network Coding as a Dynamical System

- 2. Pune 24th & 25th September 2012 (Wednesday & Thursday) Topic: Towards Green Techniques for Wireless Communications; Network Coding as a Dynamical System
- **3.** Hyderabad 26th September 2012 (Wednesday) Topic: *Same as above.*

Summary Report from Prof. Narayan B. Mandayam

I undertook an IEEE COMSOC DL tour to India during the months of September/October 2012. Specifically, I lectured in the following cities: Bengaluru, Pune, Hyderabad, Delhi and Chennai. The tour was coordinated by the IEEE Asia Pacific Regional Headquarters/Communications Society Office in Singapore and I am extremely grateful to Ms. Fanny Su and Ms. Ewell Tan who helped with the overall schedule and coordination of arrangements with the local chapter chairs. I lectured on two different topics during this tour, namely "Network Coding as a Dynamical System" and "Towards Green Techniques for Wireless Communications" and I have included the talk abstracts at the end of this document. During this lecture tour I delivered a total of 9 lectures. The range of audience members during these talks was roughly from a lower end of about 20 or so to about 150-200 in some instances. While the audience settings during these 9 lectures ranged from exclusively students/faculty to exclusively members working in industry; for the most part the lectures had a good mix of audience members from both academia and industry. I was very impressed by the level of interest and enthusiasm displayed by the audience members as well as many interesting questions during each of my lectures. I am also extremely grateful to the enthusiasm and kind hospitality of the local organizing chapters that made this a very enjoyable tour. During this tour, I also got the opportunity to make new connections with members from both academia and industry that I am sure will foster interesting research collaborations in the near future.

2013 AP DLT #1: 23 February – 1 March 2013

Lecturer: Ekram Hossain

Hosting Chapter	2013 Chapter Chairs
Malaysia ComSoc Chapter	Nordin Ramli



Prof. Ekram Hossain delivered his lectures at the following locations:-

- Perlis 25 February 2013 (Monday) Venue: Universiti Malaysia Perlis (UniMAP), Perlis Topic: Radio Resource Management in Next Generation Hierarchical Cellular Wireless Networks
- Kuala Lumpur 26 February 2013 (Tuesday)
 Venue: MIMOS Berhad, Kuala Lumpur
 Topic: Interference Modeling in Random Carrier-Sense Multiple Access Wireless Networks
- Melaka 27 February 2013 (Wednesday)
 Venue: Multimedia University, Melaka Campus
 Topic: Dynamic Spectrum Access in Cognitive Radio Networks / Game theory for multiple access and resources allocation in wireless networks

Summary Report from Prof. Ekram Hossain

Sponsored by the IEEE ComSoc and hosted by the IEEE ComSoc Malaysia Chapter, I undertook a DLT during February 21 – February 28. I delivered five lectures in the following cities: Kanagar (in Perlis), Kuala Lumpur, and Melaka.

The seminar at Universiti Malaysia Perlis (UniMAP), Perlis was very well attended (about 70+ staff, students, and people from industry) and after the seminar there were interesting discussions on the evolution of future generation cellular wireless systems. Also, I had the tour at the new Library facilities and the communications research laboratory at the campus. Thanks to the UniMAP Faculty and Staff for making a very nice arrangement for the seminar and hosting me generously. I would like to specially thank Mr. Khairil Syahmi Musa, who acted as the liaison for my visit to UniMAP.

Another talk at MIMOS Berhad was also very well attended (about 50+ MIMOS staff, graduate students, and faculty). There were discussions on interference modeling issues in wireless networks and applications of cognitive radio concepts in cellular wireless systems. I would like to express my gratitude to Drs. Nordin Ramli and Hafizal Mohamad for organizing this talk and hosting me.

The lecture at Multimedia University, Melaka Campus was attended by about 40+ staffs, students, and attendees from industry. This talk aroused lot of interests on cognitive radios among the audience. There were interesting questions asked by several students some of whom traveled more than 200 km from southern Malaysia. I would like to thank Dr. Lim Heng Siong and Dr. Mohamad Yusoff Alias who took a very good care of me during the visit to the Multimedia University, Melaka campus.

Lastly, I also delivered a lecture at Dewan Taklimat, Fakulti Kejuruterran, Universiti Putra Malaysia (UPM). This talk was hugely attended with about 90+ students and university staff. After the talk, there were a lot of questions from the audience related to publishing in the IEEE journals, copyright issues, ranking of the IEEE journals, etc. I got the impression that the audience benefited immensely from the talk. I would like to thank Dr. Nordin Ramli and Dr. Fazirulhisyam for organizing this talk and hosting me generously.

Overall, this DLT was a grand success. The interest and enthusiasm shown by the audience was impressive. I benefited from the tour by making new connections and exploring avenues for future collaborations with UniMAP and UPM.

In addition to the local organizers, I would like to express my sincere appreciation to Ms. Ewell Tan at the IEEE Asia Pacific Regional Headquartes in Singapore who coordinated the DLT.

2013 AP DLT #2: 27 April – 4 May 2013

Lecturer: Zhisheng Niu

Hosting Chapter	2013 Chapter Chairs
Malaysia ComSoc Chapter	Nordin Ramli
Thailand ComSoc Chapter	Kamol Kaemarungsi



Prof. Zhisheng Niu will be conducting his lectures at the following locations:-

1. Malaysia – 29 April 2013 (Monday)

Venue: Telekom Malaysia R&D, Malaysia Topic: Radio Resource Management in Next Generation Hierarchical Cellular Wireless Networks

Malaysia – 30 April 2013 (Tuesday)
 Venue: Universiti Kebangsaan Malaysia, Selangor
 Topic: How much energy can be traded off by how long delay in GREEN communications.

3. Thailand – 3 May 2013 (Friday)

Summary Report from Thailand ComSoc Chapter

During his stay in Thailand, Prof. Niu visited the Electrical Engineering (EE) Department at the Chulalongkorn University on May 2nd 2013. He was welcomed with a short tour around the student office and laboratory of the EE department. There were students who briefed Prof. Niu with their research works. Then, he delivered a short lecture of approximately one hour to the faculty and graduate students of the Network Research Group. The topic of his talk was "5G: A Paradigm Shift of Cellular

Networks" in which it was very interesting and provided a glimpse to the possible trends in the future of cellular network. In the end of this talk, Prof. Niu answered couples of questions from the interested students and professors. The total number of audiences was 23 which included three professors from the Electrical Engineering Department. The IEEE ComSoc Thailand Chapter had a chance to promote its facebook community page and its activities to the graduate students of the EE department at the Chulalongkorn University. This provided both awareness and could attract a number of new students members in the future. At the end of his visit, the head of the Electrical Engineering Department at the Chulalongkorn University arranged a dinner reception and they had a good discussion about the future collaboration between their universities.

On May 3rd 2013, Prof. Niu traveled to the Thailand Science Park in another province, which is located to the north of Bangkok. He delivered the distinguished lecture entitled "How much energy can be traded off by how long delay in GREEN communications?" The length of the lecture was approximately three hours including a coffee break. The total number of audiences was 35, which included three current IEEE ComSoc Thailand members, researchers from Thailand Science Park, and undergraduate students. The topic was very timely and relevant to the recently energy crisis in Thailand and the recently opening of the new spectrum for 3G Cellular Network services at 2100 MHz in Thailand. During the break, the current IEEE ComSoc members gave some feedback to the Thailand Chapter and complimented on the arrangement and showed interest in the DL's topic. The audience also asked couple of questions at the end of the lecture. After the lecture, Prof. Niu visited the office of the Embedded System Technology Laboratory and also the Optical Quantum Cryptography (OQC) Laboratory of the National Electronics and Computer Technology Center (NECTEC).





Photograph of the audiences at the EE department of the Chulalongkorn University on May 2nd 2013



Photograph of the audiences at the distinguished lecture on May 3rd 2013

2013 AP DLT #3: Scheduled Plan 16 – 26 May 2013

Lecturer: Michael Fang

Hosting Chapter	2013 Chapter Chairs
Shenzhen ComSoc Chapter	Qinyu Zhang
Shanghai ComSoc Chapter	Xinwan Li
Beijing ComSoc Chapter	Xiaofeng Tao



Dr. Michael Fang will be delivering his technical presentations at the following venues:

1. Shenzhen – 17 or 18 May 2013 (Friday or Saturday)

2. Shanghai – 20 May 2013 (Monday)

Venue 1: Shanghai Jiaotong University (at Minghang Campus) Topic 1: Capacity in Multirate and Multihop Wireless Networks. **Shanghai – 21 May 2013 (Tuesday)** Venue 2: Shanghai Research Center for Wireless Communications Topic 2: Small World Phenomena in Wireless Ad Hoc Networks

3. Beijing – 24 May 2013 (Friday)

Venue 1: Beijing University of Posts & Telecommunications (BUPT) Topic 1: Secure Network Performance for Large-Scale Wireless Ad Hoc Networks

Venue 2: Chinese Academy of Science (CAS) Topic 2: A Novel Architecture for Cognitive Radio Network

2013 AP DLT #4: 13 - 19 April 2013

Lecturer: H. Anthony Chan

Hosting Chapter	2013 Chapter Chairs
Macau ComSoc Chapter	Ben, Seng-Pan U
Beijing ComSoc Chapter	Xiaofeng Tao
Hong Kong ComSoc Chapter	Edward Cheung



Dr. H. Anthony Chan will be giving a talk on "Distributed Mobility Management for Mobile Internet" at the following locations:-

- 1. Macau 14 April 2013 (Sunday)
- 2. Beijing 16 April 2013 (Tuesday)
- 3. Hong Kong 19 April 2013 (Friday)

Summary Report from Dr. H. Anthony Chan

The first talk was organized by IEEE Macau chapter, and chapter chair: Dr. Sio Tai Cheong was the host. The chapter organized a special event on IPv6 Internet on April 14 2013 with this Distinguished Lecture and 2 other lectures on communication from local university professors. The event had the following coorganizers: Macau Science Center, Macau Public Service Staff Association, Macau University of Science and Technology, IEEE Circuit and Systems / Communication Society Macau Branch, and has sponsorship by Su-Kam Intelligent Education Systems. The event was posted at the IEEE Macau chapter website and was also announced in local newspapers: Macao Daily and Macao Shimindaily. Each attendee was given a certificate of completion of this educational training. There were about 100 attendees. The program was from 10AM to 1PM, including 15 minutes for questions, after which a Chinese banquet style lunch was provided by the sponsor. Press release was issued and the event was later reported in at least 2 local newspapers.

The next talk was organized by the IEEE Beijing chapter on April 16 at 3:30PM at Beijing University of Post and Telecommunication, and Professor Xiaofeng Tao was the host. About 40 people attended the talk, after which questions were asked. The university had recorded this lecture. The talk was preceded by a tour of the broadband communication lab, and continued with discussions during dinner afterwards.

The next talk was organized by the IEEE Hong Kong CAS/COM Joint chapter on April 19 at 4:30PM, and Friday afternoon is the usual meeting time for this chapter. The talk was advertized to all the over 3000 IEEE members there, and about 40 people attended.

On the way back to Dallas, I stopped over Los Angeles to combine a West Coast DLT with the Asia DLT. The international flight from Dallas to Asia would stop at Los Angeles on its return anyway. It included 5 chapters. Dr. David Pehlke with help from Victor Lin at The Buenaventura chapter hosted the talk on April 22 2013 at 7-8PM at Skyworks Corp., with dinner starting at 6:30PM (<u>http://www.ieee-bv.org/2013/04/distinguished-lecture-dr-a-chuan-huawei-technologies /</u>).

Dr. Ramon Grijalva at The Coastal Los Angeles chapter hosted on April 23 at noon at The Aerospace Corporation. The talk is preceded by lunch for the chapter. Peter Beal and Jack Sun of IEEE San Fernando Valley Computer and Communication Societies Joint Chapter hosted on April 23 at 6-8PM at Acapulco Restaurant beginning with dinner. Glenn Fogarty of The IEEE Orange County Communications and Signal Processing Joint chapter hosted on April 24 at Doubletree Club Hotel at 7-9PM with dinner at 6:30PM. Dr. Zhensheng Zhang of the IEEE Communication Society San Diego Chapter hosted on April 25 at the UCSD Extension facility at 6PM with pizza starting at 5:30PM (<u>http://www.sdieee.org/cgi-</u> bin/WebObjects/ieee.woa/2/wo/wBENGztmLhOYAjGXc1o0Ww/8.3.0.9.5.8.3.1.4.5.0.5).

Each chapter has scheduled the talk into its chapter activity accompanied with either lunch or dinner providing opportunity for the members to socialize. The total attendance in all these 5 chapters was about 150.



Summary Report from Beijing ComSoc Chapter

IEEE Communications Society (ComSoc), Beijing Chapter arranged a lecture on 16 April 2013 (Tuesday). Dr. Chan, IEEE Fellow, was invited to give the 50 minutes lecture on 'Distributed Mobility Management for Mobile Internet'. The lecture took place from 3:30-4:40 pm, China Time. Prof. Xiaofeng Tao, Chair of Beijing ComSoc Chapter, hosted the seminar. There were totally about 65 attendees, including university students, academic researchers and public participants from ICT related Industries.

The initial preparation mainly includes information announcement, auditorium preparation and the guest receiving.

The related information about the lecture, including abstract of the talk and a brief introduction of Dr. Chan was notified on the BUPT website announcement board by the school academic committee. Also, the lecture announcement was E-mailed to IEEE ComSoc Members in Beijing by Prof. Tao.

We booked the formal auditorium to host Dr. Chan's lecture, located in BUPT campus, which is normally used for the academic lectures.

Dr. Chan stayed at Jin Jiang Inn, which is quite close to BUPT. Dr. Chan was picked up from the hotel to BUPT campus two hours before the lecture. Prof. Tao had a talk with Dr. Chan and they visited the various labs of BUPT.

Before the auditorium opened, many students were already waiting outside. The lecture was started at 3:30 pm and hosted by Prof. Tao. Nearly 65 participants from academia and industry, both IEEE ComSoc Members and non-members were present for the lecture.

Dr. Chan took 50 minutes for his lecture on 'Distributed Mobility Management for Mobile Internet'. Audiences were very interested in the topic and contents. Notes were taken by most of the audience.

After the Lecture, 20 minutes were left for the audience Q/A. With limited time, 4 questions were answered, covering both of the basic and professional aspects of the topic. Due to the shortage of Q/A time, several participants had further exchanges with Dr. Chan after the session ended.

After the lecture, Dr. Chan had a further talk with various professors in BUPT and visited the related labs, he then returned to hotel after having dinner with Prof. Tao.

It was our pleasure to host Dr. Chan and we believe that his lecture brought many significant ideas in the minds of research students and at the same time cleared many doubtful minds.

We also hope that Dr. Chan also had a pleasant experience for his visit to Beijing.

Written by IEEE Beijing ComSoc Chapter

Summary Report from Hong Kong ComSoc Chapter

Around 50 people attended the DLT. Their background is a mix of academia and industry. The ratio is about 4 to 1. As for those from academia, most of them are research personnel or research students.

Hong Kong CAS/COM joint Chapter purposely made IEEE DLTs open to the public. To us, organizing a DLT is not only a service to our IEEE members, but also a means to promote IEEE and recruit new members. The ratio of members to non-members is around 3 to 2.

In the talk, the speaker explained existing mobility management standards in IETF, the issues of mobility management for the future mobile Internet, the trend of the mobile Internet and the proposed distributed mobility at IETF. Audience was interested in the topics addressed in the talk. There was a hot discussion in the Q&A section. The talk ended at around 5:45 pm.

We have no specific suggested improvements for future DLTs.

Written by Dr. Y. H. Chan

Department of Electronic and Information Engineering, The Hong Kong Polytechnic University

2013 AP DLT #5: Scheduled Plan 25 – 31 August 2013

Lecturer: Ekram Hossain

Hosting Chapter	2013 Chapter Chairs
Indonesia ComSoc Chapter	Satriyo Dharmanto



Prof. Ekram Hossain will be delivering his technical presentations at the following venues:

1. Bandung – 26 August 2013 (Monday)

Venue : IT Telkom Topic : Modeling, Analysis, and Design of Multi-tier and Cognitive Cellular Wireless Networks and; Radio Resource Management in Multi-tier Cellular Wireless Networks

2. Jakarta – 27 August 2013 (Tuesday)

Venue : Floatway / Universitas Mercu Buana Topic : Modeling, Analysis, and Design of Multi-tier and Cognitive Cellular Wireless Networks and; Radio Resource Management in Multi-tier Cellular Wireless Networks

3. Yogyakarta – 28 August 2013 (Wednesday)

Venue : Universitas Gadjah Mada, Yogyakarta Topic : Modeling, Analysis, and Design of Multi-tier and Cognitive Cellular Wireless Networks

Karawaci, Banten Province – 29 August 2013 (Thursday)
 Venue : Universitas Pelita Harapan
 Topic : Radio Resource Management & Intereference Analysis in Multi-tier Wireless
 Network

In the beginning of 2013, 5 approved DLTs were scheduled and we still continue to receive interests to host / to conduct a DLT program in our region.

We are pleased to see that we have quite a number of interests from our enthusiastic volunteers who are keen to host DLT program for the benefits of their local members and also our distinguished lecturers who are willing to travel to our region to share their expertise.

We have another one DLT in planning stage, and we hope to receive more interests from our ComSoc Chapters in this region before the end of 2013!
