

### Joint Communications

#### Norsat Microwave and Satellite Terminal Technology

Dr. Amiee Chan  
Norsat International Inc.

Monday 15 December 700 - 900pm  
BCIT SW3-1750

Norsat has been a leader in providing Microwave Products and Satellite terminal products for satellite user ground stations for over 30 years. These products receive and/or transmit microwave radio signals from/to satellites and convert the signals into forms suitable for

been published over a dozen times, currently holds 3 US patents in satellite technologies and has been involved in high level research teams such as the NASA ACTS Terminal Program. Her vision and expertise in satellite communications have driven product line expansion, operational efficiencies and a corporate restructuring as part of her planned turnaround at Norsat International Inc. Amiee Chan's exceptional track record of business improvements is based on her ability to have a complete understanding of a business. She is recognized for ability to make rapid decisions on sales, product development, operations and corporate strategy from the standpoint of an engineer and a CEO. Her strategic approach to building a business is reflected in her growing Creo Inc.'s 80 million dollar consumables product division. Dr. Chan guided Creo through multiple product developments, beta programs, rollout strategies and product launches. Offering a rare blend of technical and corporate strength, Dr. Chan has achieved great success through her management of numerous business units. As the Director of Research and Development at Norsat International Dr. Chan produced several highly successful product lines that continue to be high revenue generators for the company. Prior to her promotion to CEO, Dr. Chan served as Vice President of Operations where the company experienced significant improvements to R&D, Production, IT, Customer Service, Supply Chain and Logistics, Sales and Quality Control. While under her management Dr. Chan turned around Micro-



audio, video, or digital processing. Norsat's microwave products include: Receivers (LNBS), Transmitters, Transceivers, Satellite ground equipment components include Polarizers, Filters, Waveguide Diplexers and other accessories. Norsat is also a leading provider of portable and flyaway terminals, vehicle mount terminals and maritime terminals. This presentation covers the key applications of these technologies, the technical and environmental challenges associated and the solutions provided to meet the challenges of today's markets.

**Speaker:** Dr. Amiee Chan, President and CEO, Norsat International Inc., has over 15 years of experience in executive management and research development in the satellite industry. An accomplished engineer, she has

### Power Electronics

#### A Semiconductor Based Tap Changer

Albert Dunford, Colm Gallen  
and Daniel Harvey, Legend Power

Monday 15 December Noon - 130pm  
SkyTrain Auditorium, BC Hydro, Edmonds

Who should attend and interest area: Power Electronics and Power Engineering technically interested people. Please sign in as a visitor with security at main entrance; SkyTrain auditorium is around the corner from the security desk.

**Sponsors:** BC Hydro, IEEE Power Electronics, Legend Power, www.legendpower.com  
**Info, Register:** email Rasvan Mihai at Rasvan\_Mihai@plugpower.com or call 604-233-7608



Technically co-sponsored by:



## THE SECOND UBC/IEEE MINI-SYMPOSIUM ON SATELLITE COMMUNICATIONS

Friday 09 January 2009  
1230 - 430pm

Organized by:  
UBC Radio Science Lab  
IEEE Joint Communications Chapter

Sponsored by:  
 Western Economic Diversification Canada Diversification de l'économie de l'Ouest Canada



Hosted by:  
MacDonald Dettwiler & Associates  
13800 Commerce Parkway  
Richmond, British Columbia

Printable Map

### NOMINATIONS FOR 2009 FELLOWS

It's not too early to nominate an IEEE senior member for the Fellow class of 2010.

**The deadline is 1 March 2009.**

This prestigious group now numbers 6000 out of IEEE's total of 375,000 members. While many view Fellows as visionaries, pioneers, technology leaders, or influential business executives, you probably know them as your friends or colleagues.

So take the time to nominate someone you know in one of four Fellow categories: application engineer, educator, research engineer, or technical leader.

To submit a nomination or to learn more about these categories and the IEEE Fellow Program, visit the Fellow Web site at <http://www.ieee.org/fellows>.

### OCTOBER MEMBERSHIP HIGHLIGHTS

IEEE membership reached 368,725 in October 2008, an increase of 0.9 percent compared to October 2007.

Specifically, higher grade memberships are up 0.5 percent, and student memberships are up 2.2 percent.

Comparative data currently is unavailable for Societies, Women in Engineering and Standards Association.

Complete details are available in the Membership Development Report at <http://www.ieee.org/mdprogreport>.

In order to access this site, you must use your IEEE Web Account. If you do not have an IEEE Web Account, please go to <http://www.ieee.org/portal/pages/web/accounts/index.html>.

### About the event

In recent years, satellite designers and service providers have begun to exploit the Ka-band (20/30 GHz) as they seek to provide ever higher data rates and capacities at lower cost. Through the efforts of industry, government and academia, Canada has emerged as a leader in this field.

During this afternoon event, presenters from UBC, MacDonald Dettwiler and Associates, Norsat International and Orbital Research will review recent progress in Ka-band satellite communications to both LEO and GEO with particular focus on Ka-band propagation studies, systems engineering, and product development.

### Free Downloads

- *Handbook of Propagation Effects for Vehicular and Personal Mobile Satellite Systems - Overview of Experimental and Modeling Results* by J. Goldhirsh and W.J. Vogel (348 pp.)

- *NASA Propagation Effects Handbook for Satellite Systems Design, Fifth Edition*, by L.J. Ippolito (421 pp.)

Overview Section 1  
Section 2 Section 3

### Registration

Thanks to generous sponsorship by Western Economic Diversification Canada, registration for this event is free of charge.

Please register by sending your name, company affiliation, and contact information to Prof. Dave Michelson, UBC at [davem@ece.ubc.ca](mailto:davem@ece.ubc.ca).

Because the event is being held in a semi-secure facility, all attendees must register in advance, and no later than the close of business on Tue, 6 Jan 2009.

**Space is limited, so registrations will be accepted on a first-come, first serve basis.**

The meeting time (Friday afternoon) and place (close to BC Ferries, Vancouver Airport, and the US-Canada border) have been chosen to be particularly convenient for visitors from Vancouver Island, the BC Interior, Alberta, and Washington state.

### Agenda

12:30-13:00	<b>Lunch</b>
13:00-13:05	<b>Welcome and Introduction</b> Michael KW Lee Western Economic Diversification Canada
13:05-13:15	<b>A Brief History of Ka-Band Satellite Communications;</b> Prof. Dave Michelson UBC Radio Science Lab
13:15-13:35	<b>Modelling and Simulation of Rain Fading on Ka-band Links to Low Earth Orbit;</b> Laura W. Liu UBC Radio Science Lab
13:35-13:55	<b>Modelling and Simulation of Scintillation on Ka-band Links to Low Earth Orbit;</b> Prof. Dave Michelson UBC Radio Science Lab
13:55-14:10	<b>Refreshment Break</b>
14:10-14:30	<b>The Ka-band Satellite Beacon Receiving Terminal at UBC;</b> Claire Chuang and Lance Loosdrecht UBC Radio Science Lab (TBA)
14:30-14:50	<b>The Challenges of Ka-band Auto-Acquire Terminals;</b> Michael Scheffer, Director of Engineering Norsat International Inc.
14:50-15:10	<b>Refreshment Break</b>
15:10-15:20	<b>Ten Years of Ka-Band Satellite Communications at MDA;</b> Mark Wlodyka, Director of Business Development, MDA.
15:20-15:40	<b>Ka Band Satellite Communications - A Global Business;</b> Mike Stevens, President Orbital Research Ltd., White Rock, BC
15:40-16:00	<b>Panel Discussion - The Future of Ka-band Satellite Communications Technology</b>
16:00-16:20	Moderator: Dave Michelson, UBC; Mark Wlodyka, MDA; Mike Stevens, Orbital Research; Mike Scheffer, Norsat International
16:20-16:30	<b>Wrap-up</b>