

**McMaster University, Faculty of Engineering
Applause and Accolades
May 2011**

Faculty and Student Award Recipients

Canada Research Chairs

Qiyin Fang, renewed as Canada Research Chair in Biophotonics

Named Chairs

David Potter, appointed Don Pether Chair in Engineering and Management

Ali Emadi, appointed Canada Excellence Research Chair in Hybrid Powertrain. It is one of 19 new Canada Excellence Research Chair (CERC) appointments at 13 universities. Each appointment receives up to \$10 million in federal funding over seven years.

Major Research Awards

Tom Maibaum, \$16.6 million national research network to develop advanced software in vehicles, led by McMaster researchers. The Network on Engineering Complex Software Intensive Systems for Automotive Systems (NECSIS) Automotive Partnership Canada, of which NSERC is the lead agency, is providing \$10.5 million in funding to the network over five years. Industry and academic partners are contributing \$6.1 million.

John Preston, recipient of a \$1.65 million Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Training Experience (CREATE) award that will support the training of students in photovoltaics.

Jun Chen, recipient of Early Researcher Awards: A New Look at the Fundamental Limits of Multisource Multicast Communication; \$240K

Wael El-Dakhkhni, recipient of Early Researcher Award: Sustainable Concrete Masonry Building Systems; \$240K ?

Todd Hoare, recipient of Early Researcher Award: Biodegradable Nanoengineered Hydrogels for Prolonged and Targeted Drug Delivery; \$240K

Ravi Selvaganapathy, recipient of Early Researcher Award: Microfabrication and Microfluidic Technologies for Drug Discovery; \$240K

Michael Tait, recipient of Early Researcher Award: Innovative Devices to Reduce Building Damage and Improve Building Occupant Safety During an Earthquake; \$240K

Hatem Zurob, recipient of Early Researcher Award: A New Generation of High Strength, Low Cost Steels; \$240K

Michael Noseworthy, recipient of Ontario Research Funding – Research Infrastructure: Non-Invasive Imaging of Healthy and Diseased Human Skeletal Muscle; \$100K

Robert Pelton, recipient of Ontario Research Funding – Research Infrastructure: Quartz Crystal Microbalance for Engineering Paper Surfaces for Improved Bioactivity; \$106K

Martin von Mohrenschildt, recipient of Ontario Research Funding – Research Infrastructure: Brain-imaging in an Immersive Motion Simulator; \$235K

Gregory Wohl, recipient of Ontario Research Funding – Research Infrastructure: Infrastructure to Establish a Research Laboratory for Bone Adaptation and Biomechanics; \$250K

Raymond LaPierre, funding from the Natural Sciences and Engineering Research Council of Canada's (NSERC) Strategic Project Grants program for the development of nanowire infrared photodetectors, in collaboration with Dalsa Corporation and Lockheed Martin Corporation; \$360K over 3 years

Anthony Petric, funding from the Natural Sciences and Engineering Research Council of Canada's (NSERC) Strategic Project Grants program for research into interconnect coatings for solid oxide fuel cells, in collaboration with Gates Canada Inc.; \$313K over 3 years

Igor Zhitomirsky, funding from the Natural Sciences and Engineering Research Council of Canada's (NSERC) Strategic Project Grants program for research of advanced supercapacitor modules for energy storage, in collaboration with Tavrma Canada Ltd.; \$208K over 3 years

Natalia Nikolova, John Bandler, and Mohamed Bakr, funding from the Natural Sciences and Engineering Research Council of Canada's (NSERC) Strategic Project Grants program for research into concealed weapon detection with microwave radar, in collaboration with Acceleware Corp., A.U.G. Signals Ltd., Defence R&D Canada, and Industry Canada; \$120K over three years

Mohamed Bakr, funding through NSERC Discovery Accelerator Supplement (DAS) Program, "Efficient Modeling and Design Optimization of Computationally Intensive High Frequency Structures"; \$120K over three years

Wael El-Dakhkhni, funding through NSERC Discovery Accelerator Supplement (DAS) Program, "System-level Seismic Performance Evaluation of Reinforced Masonry Buildings"; \$120K over three years

Peidong Wu, funding through NSERC Discovery Accelerator Supplement (DAS) Program, "Constitutive Modeling of Large Strain Behaviour of Magnesium Alloys"; \$120K over three years

Professional Associations & Societies

Yves Bréchet, named a Chevalier (Knight) de la Légion d'honneur (the National Order of the Legion of Honor)

Jamal Deen, recipient of the 2011 Electronics and Photonics Division (EPD) Award from the Electrochemical Society

Simon Haykin, presented with McMaster University, Honorary Doctorate of Science degree

Simon Haykin, awarded the IEEE EAB Vice President's Recognition Award "for fundamental contributions to research and education in Adaptive Signal Processing and Learning Systems, applications in radars and communications techniques, and worldwide impact on education and training of electronics engineers"

Todd Hoare, awarded 2010 Polanyi Prize, Government of Ontario

Shiva Kumar, named a senior member by The Optical Society of America (OSA)

John MacGregor, presented with the McMaster Lifetime Innovator Award, McMaster Innovation Showcase 2010, in recognition of his pioneering efforts to introduce university and industry collaboration at McMaster

Natalia Nikolova, elected Fellow of the IEEE

Gary Purdy, presented the 2010 The Hillert-Cahn Lectureship Award

David Wilkinson, elected Fellow of the Canadian Academy of Engineering (FCAE)

Don Woods, named 2011 ConocoPhilips Lecturer in Chemical Engineering at Oklahoma State University

Don Woods & Heather Sheardown, received the Corcoran Award from the Chemical Engineering Education Society for best paper

Xiaolin Wu elected Fellow of the IEEE

Shiping Zhu, elected Fellow of the Canadian Academy of Engineering (FCAE)

Shiping Zhu, elected 2011 Fellow of the Engineering Institute of Canada (FEIC)

Shiping Zhu, 2011 winner of the Macromolecular Science and Engineering Award, Chemical Institute of Canada

Teaching Awards

Carlos Filipe, recipient of the President's Award for Excellence in Instruction

Nicola Nicolici, named recipient of the McMaster Students Union Teaching Award for Engineering

Michael Soltys recipient of the McMaster Student Union (MSU) Teaching Award for the Faculty of Engineering

University and Faculty of Engineering Appointments

Brian Baetz, appointed Chair of the Department of Civil Engineering

Judith West-Mays and Michael Noseworthy, co-directors appointed to lead McMaster's School of Biomedical Engineering

Student Awards

Reinhard Peer and Christoph Larndorfer, won the MTT Alive video competition for their creative and entertaining video for their fourth-year Electrical and Computer Engineering capstone project at McMaster. Hanseul Choi and Emily Lukes were also part of the project team that developed the monitor

Yaser Jafar, Charles Wah, Khaled Chebaro, and Lucas Dobrowolski all in their final year, placed third in the Innovate North America Altera Design Contest for inventing a 3-D camera. The camera takes video and still images that appear in three dimensions when the viewer puts on a traditional pair of 3-D glasses

Emily Bot, Mike Irvine, Dan Kish, Danny Vacar and Bryan House (Robot Unicorn Attack Team) won one of three competitions and placed third in another at the fifth annual International Autonomous Robot Racing Challenge (IARRC)

Alyssa Briere, Benjamin Desclouds, Ahmed Salman, and Brycklin Wilson, Materials Science and Engineering students, were awarded FeMET (Ferrous Metallurgy Education Today) scholarships by the Association for Iron and Steel Technology (AIST) and the American Iron and Steel Institute

McMaster's chapter of Engineers Without Borders (EWB) was named Chapter of The Year by Engineers Without Borders Canada

McMaster Concrete Toboggan Teams, the McMaster Outlaw Aerobics, the world's only all female concrete toboggan team, received the Best Brake Design award and the McMaster Mactalia Football Club team won the Best Team Spirit award

Nathan Cox, fifth-year electrical engineering student and swim team captain, was presented the Dr. Ray Johnson Award, as the graduating male student-athlete who best exemplifies the 'Spirit of McMaster' while showing noteworthy athletic ability

Nathan Cox, Varun Goyal, Deepak Gidwani, Piyush Patel and Aekam Sodhi won the Eco-Entrepreneurship Challenge with their final year ECE project, the Dynamic Demand Controller

Erica Barnes, Engineers Canada Gold Medal Student Award

Erica Barnes, President's Award of Excellence for Student Leadership

Erica Barnes, Image of an Engineer Award (through the McMaster Engineering Society)

Erica Barnes, Albert Lager Student Initiative Award, 2010

Graduate Student Awards

Adam Kinsman, electrical and computer engineering PhD graduate, is the recipient of the 2010 Douglas R. Colton Medal for Research Excellence awarded by CMC Microsystems

Waleed Shinwari, a graduate student in the Department of Electrical and Computer Engineering, was presented with the Dean's Award for Excellence in Communicating Graduate Research

Nels Grauman Neander, a graduate student in the Department of Chemical Engineering, received the GSA Honour Society (Distinguished Service) Award

Ho Fai (Henry) Ko, graduate student in the Department of Electrical and Computer Engineering is the recipient of an outstanding PhD dissertation award by the European Design and Automation Association (EDAA) for 2010

Engineering Technology Building Awards

Achieved LEED Canada for New Constructions (NC), certified to a rating level of Gold