

# OMCOS 12

12<sup>th</sup> IUPAC SYMPOSIUM ON  
Organometallic Chemistry  
Directed towards Organic Synthesis



**Second Circular**

July 6 – 10, 2003  
Toronto, Ontario CANADA

Website: [www.chem.utoronto.ca/symposium/omcos12/](http://www.chem.utoronto.ca/symposium/omcos12/)

## Table of Contents

Welcome Message  
Scientific Program  
Symposium Schedule  
General Information  
Accommodation Information  
Social Program

### OMCOS Prize

We are pleased to announce that **Professor Kyoko Nozaki, University of Tokyo**, is the winner of the OMCOS Prize in Organometallic Chemistry, sponsored by the Yen Chuang Foundation and Springer Verlag.

**Her lecture title: *Asymmetric Catalytic Synthesis of Polyketones and Polycarbonates***

We would like to thank our sponsors:

IUPAC  
Advanced Synthesis and Catalysis  
AstraZeneca International  
Aventis Pharmaceuticals  
Biovectra dcl  
Boehringer Ingelheim Ltd.  
Brantford Chemicals Inc.  
Bristol Meyers Squibb Canada Inc.  
Diagnostic Chemicals Ltd.  
Eli Lilly and Company  
Hoffman-La Roche Inc.  
McNeil Consumer Healthcare  
Merck Frosst  
Novartis Pharma AG  
Pfizer, Inc.  
Pharmacia Corporation  
Royal Society of Chemistry  
Sigma Aldrich Corporation  
Solvias  
Thieme Chemistry  
Torcan Chemical Ltd.  
University of Toronto, Faculty of Arts and Science  
University of Toronto, Department of Chemistry

## Important Dates

May 1, 2003	Deadline to receive abstract for oral and poster presentations. Abstract by fax is not acceptable.
May 1, 2003	Deadline for early registration.
June 1, 2003	Notification of acceptance of paper.
June 1, 2003	Deadline to receive accommodation request.

## Secretariat

OMCOS -12  
Department of Chemistry  
University of Toronto  
80 St. George Street  
Toronto, Ontario CANADA  
M5S 3H6  
Phone: 416-978-6031  
Fax: 416-978-1631  
E-mail: [omcos@chem.utoronto.ca](mailto:omcos@chem.utoronto.ca)  
Website: [www.chem.utoronto.ca/symposium/omcos12](http://www.chem.utoronto.ca/symposium/omcos12)

## Welcome Message

It is with great pleasure that we invite you to participate in the 12<sup>th</sup> IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS-12) to be held in Toronto from July 6 – July 10, 2003, under the auspices of the International Union of Pure and Applied Chemistry.

The symposium returns to Canada for the first time since 1987, and follows the very successful series of OMCOS meetings held at Fort Collins (1981), Dijon (1983), Kyoto (1985), Vancouver (1987), Florence (1989), Utrecht (1991), Kobe (1993), Santa Barbara (1995), Gottingen (1997), Versailles (1999) and Taipei (2001).

OMCOS brings together chemists from industry and academia to discuss the latest advances in new metal-catalyzed reactions, novel preparations and reactions of organometallic reagents, improved methods for the synthesis of pharmaceuticals, agrochemicals and materials using metals and mechanistic insights into important and established metal-based reactions. We strongly encourage younger scientists and in particular graduate students and postdoctoral fellows to attend and see first-hand the state of the art in this important field.

The program of the symposium features plenary lectures, invited lectures, short communications and poster sessions. Established leaders in the field, young

and emerging investigators and leading scientists from industry will share their results. We look forward to seeing you in Toronto.

**Mark Lautens**  
**Chairman**  
**OMCOS-12**

## Scientific Program

### Themes

- Asymmetric Synthesis via Organometallics
- Structural and Mechanistic Aspects Related to Synthesis
- Catalytic Processes Involving Organometallics
- Organometallics in Materials Research

### Scientific Sessions

The symposium format includes 7 plenary lectures (50 minutes), the OMCOS Prize Lecture, 16 invited lectures (35 minutes) and short lectures (15 minutes).

### Main Session Lectures

#### Plenary Lectures

- Antonio M. Echavarren (Spain)  
*Transition Metals for the Activation of Alkynes*
- John Hartwig (USA)  
*Discovery and Mechanistic Understanding of New Late-Transition Metal-Catalyzed Reactions for Organic Synthesis*
- Tamio Hayashi (Japan)  
*Rhodium-Catalyzed Asymmetric Carbon-Carbon Bond Forming Reactions*
- Philip Kocienski (UK)  
*Asymmetric Synthesis with  $\pi$ -Allylmolybdenum Complexes: Applications to Natural Product Synthesis*
- Ilan Marek (Israel)  
*New Regio-, Stereo-, Diastereo- and Enantio- Selective One-Pot Reactions Mediated by Organometallic Derivatives*
- Koichi Mikami (Japan)  
*Symmetry Breaking in Asymmetric Catalysis: Racemic to Auto-Catalysis*
- Larry Overman (USA)  
*Synthesis Applications of Palladium Catalyzed Asymmetric Reactions*

#### Invited Lectures

- Pher Andersson (Sweden)  
*Development of New Methodology for the Preparation of Optically Active Alcohols*
- Geoff Coates (USA)

*New Catalysts for the Synthesis of Small Molecules and Defined Polymer Architectures*

- Gunther Helmchen (Germany)  
*Application of Allylic Substitutions in Natural Products Synthesis*
- Chul-Ho Jun (Korea)  
*Chelation-Assisted C-H and C-C Bond Cleavage by Rh(I) Catalyst*
- Anny Jutand (France)  
*The Dual Role of Nucleophiles in Palladium-catalyzed Heck, Stille, and Sonogashira Reactions*
- Shane Krska (USA)  
*Mechanistic Studies of Mo-catalyzed Asymmetric Allylic Alkylations*
- Peter Kundig (Switzerland)  
*Stereoselective Chromium and Molybdenum Mediated Transformations of Arenes*
- Walter Leitner (Germany)  
*Catalyst Immobilization Using Supercritical Fluids*
- Marc Lemaire (France)  
*Heterogeneous (Asymmetric) Catalysis and Fine Organic Synthesis*
- Guy C. Lloyd-Jones (UK)  
*Coordination of the Trost Modular ligand to Pd allyl species*
- Shengming Ma (China)  
*Recent Advances on Transition Metal-Catalyzed or Mediated Cyclization of 2,3-Allenic Acids. New Methodologies for 2,3-Allenic Acids*
- SonBinh T. Nguyen (USA)  
*Stereoselective Olefin Cyclopropanation with Group VIII Metal Salen catalysts*
- Warren Piers (Canada)  
*Mechanistic Insights into Perfluoroaryl Borane Catalyzed Allylstannations: Is Asymmetric Induction Possible with Chiral Boranes?*
- Claudio Trombini (Italy)  
*3-Halopropenyl Esters as Precursors of a New Class of Heterofunctionalized Allylic Organometallic Compounds: Synthetic Applications*
- Ross A. Widenhoefer (USA)  
*Palladium Catalyzed Olefin Alkylation*
- Andrei Yudin (Canada)  
*Development of New Catalytic Processes*

### **Submission of Abstract**

All attendees of OMCOS-12 are welcome to present a communication in poster sessions. The format and guidelines for submitting an abstract are indicated on the OMCOS Conference website at

<http://www.chem.utoronto.ca/symposium/omcos12/abstract.html>

An author who wishes to have a poster considered for oral presentation should indicate this on abstract form. The selection of candidates for Short Lecture will be made by the Organizing Committee on the basis of submitted abstracts.

### **Guidelines and suggestions:**

- Submission of the abstract must be in **Microsoft Word format**

- The abstract should be submitted as an email attachment to Professor William Tam at wtam@uoguelph.ca
- Since the abstract will be reproduced directly, editing will not be possible
- Authors have full responsibility for the correct design and contents
- The text of the abstract should be written in English with **1.5 line spacing** (or equivalent) on **one page (Times New Roman 12 points with full justification are recommended)**
- Since the original manuscript will be reduced to 75% during printing, *a small type face is not recommended*
- All figures should be of good quality and the lettering should be readable after reduction
- If there are any questions, please contact Professor William Tam at wtam@uoguelph.ca

**The deadline for abstract submission is May 1st, 2003.**

### **Poster Session Award**

We are pleased to announce that several best poster awards will be given at this conference. The prize will include a one-year free subscription to prestigious journals.

### **Technical Information for Presentations**

#### Oral

Standard slides (5 x 5 cm, 2 x 2 inches) and overhead projection facilities will be available. LCD Projectors will be available upon advanced notification. Presenters are requested to bring their own laptop computer.

#### Posters

A board of 1.2 m (height) x 1.8 m (width) will be reserved for each poster presentation. Velcro fasteners will be available.

	Sun (July 6th)	Mon (July 7th)	Tues (July 8th)	Wed (July 9th)	Thur (July 10th)	
8:20-8:30am		Opening Remarks				
8:30-9:20am		PL2	PL4	PL5	PL7	
9:20-9:35am		SL	SL	SL	SL	
9:35-10:10am		IL1	IL7	IL9	IL15	
10:10-10:25am		SL	SL	SL	SL	
10:25-10:45am		<b>Coffee Break</b>				
10:45-11:20am		IL2	IL8	IL10	IL16	
11:20-11:35am		SL	SL	SL	SL	
11:35-11:50am		SL	SL	SL	PL8 (11:35-12:25pm)	
11:50-12:05pm		SL	SL	SL		
12:05-12:20pm		SL	SL	SL		
12:20-1:45pm		<b>lunch</b>				<b>Closing Remarks 12:25-12:35pm</b>
1:45-2:20pm		IL3	Free Afternoon in Toronto - Optional visits to the Art Gallery of Ontario, Royal Ontario Museum, and the Gardiner Museum	IL11		
2:20-2:55pm	IL4	IL12				
2:55-3:10pm	SL	SL				
3:10-3:45pm	IL5	IL13				
3:45-4:05pm	Coffee Break	Coffee Break				
4:05-4:40pm	IL6	IL14				
4:40-5:30pm	PL3	PL6				
5:30-5:40pm	Opening Remarks (5:15-5:40pm)	Poster Session	Poster Session and Thieme Reception & OMCOS Prize Winner	Conference Banquet		
5:40-6:30pm	PL1					
6:30-8:30pm	Welcome Reception					

PL= Plenary Lecture (50 min.); IL= Invited Speakers (35 min.);  
SL= Short Lectures (15 min.)

## General Information

### Symposium Venue

The lectures will be held in Convocation Hall at the centre of the University's downtown campus. The poster sessions will be held in the Great Hall of Hart House, a short walk from Convocation Hall.

The Registration Desk will be located in the East Common Room, Hart House.

Sunday, July 6	12:00 PM - 5:00 PM
Monday, July 7	8:00 AM - 5:00 PM
Tuesday, July 8	8:00 AM - 5:00 PM
Wednesday, July 9	8:00 AM - 12:00 PM
Thursday, July 10	8:00 AM - 12:00 PM

### Language

The official language of the Symposium is English.

### Registration Fees:

<b>Fees are in US Dollars</b>	<b>Before May 1, 2003</b>	<b>After May 1, 2003</b>
Active Participant	\$550.00 USD	\$625.00 USD
IUPAC Affiliation Member	\$500.00 USD	\$575.00 USD
Student and Postdoc	\$150.00 USD	\$200.00 USD
Accompanying Person	\$150.00 USD	\$170.00 USD

**\$1.00 CAD = \$0.65 USD**

Please return the enclosed registration form together with the registration fee, social program and other payments to:

Secretariat – Sue McClelland  
OMCOS -12  
Department of Chemistry  
University of Toronto  
80 St. George Street  
Toronto, Ontario CANADA  
M5S 3H6  
Phone: 416-978-6031  
Fax: 416-978-1631

E-mail: [omcos@chem.utoronto.ca](mailto:omcos@chem.utoronto.ca)

Website: [www.chem.utoronto.ca/symposium/omcos12](http://www.chem.utoronto.ca/symposium/omcos12)

### Payment of Fees

1. Payment in US Dollars can be made by bank draft, or MasterCard or Visa. We are not able to accept American Express. No reservation will be confirmed until payment is received.
2. Please make bank draft payable to:

### **OMCOS-12**

3. We regret that we are unable to accept personal cheques. Please ask the secretariat for advice if you have any difficulty caused by exchange regulations in your country.

Each participant must submit an individual registration form. Registration will be acknowledged with a confirmation letter.

The following items are included in the registration fee for all participants: Admission to all scientific sessions, full set of symposium documents, and book of abstracts, Welcome Reception, three lunches, and coffee break beverages.

The accompanying person fee includes:  
Welcome Reception, three lunches, and coffee break beverages.

**Conference Materials including the badges can be obtained at the registration desk during the Symposium.**

#### Refund in Case of Cancellation

In the event that canceling of registration (Participants, Accompanying person, Social program and Excursions) is necessary, please notify OMCOS-12 secretariat in writing or fax. The policy is as follows:

1. Cancellation received before June 15, 2003: 70% refund.
2. Cancellation received after June 15, 2003: no refund.

Refunds will be made **after** the OMCOS-12 symposium.

#### Letter of Invitation

The Symposium chairman will be happy to write an official invitation for a registered participant. No financial commitment on the part of the organizer of the OMCOS-12 is implied.

#### Passports and Visas

Participants are strongly advised to determine which requirements apply to them with respect to entering Canada. For information, please consult your nearest Canadian Embassy, High Commission, Consulate, Customs Agent or your travel agent.

#### Insurance

The conference organizers cannot accept liability for personal injuries sustained, or for loss of or damage to, property belonging to symposium participants (or their accompanying persons), either during or as a result of this Symposium. Please check the validity of your own insurance.

#### Health Insurance

Visitors are NOT covered by the Canadian Health Insurance Plan. It is therefore recommended that participants arrange their own health and accident coverage. This can be done before leaving home through a local travel agent or medical association.

#### Climate

The weather of Toronto in July is very warm. The temperature can range from 27 degrees celsius to 14 degrees celsius. The conference site will be air-conditioned.

#### Currency

The local currency is the Canadian Dollar. The current exchange rate is approximately \$1.00 CAD = \$0.65 USD. Travellers' cheques can be cashed at numerous banks and stores (with purchases). There are numerous ATM Bank Machines in downtown Toronto, and on the University campus. Banks are generally closed on Sundays in Toronto. There is a foreign exchange booth at the Toronto airport.

#### Taxes:

The Goods and Services tax (at time of printing) is a seven percent tax that is charged on most goods and services sold or provided in Canada. Foreign visitors to Canada can apply for a rebate on the GST that is paid on accommodation (up to 30 nights per visit), and on goods purchased in Canada and exported within 60 days of the purchase. They can apply for GST refunds only after they return to their own country. Rebate forms will be available at your hotel. For more information, please visit the Canadian Government page with details on tax rebates for visitors at: [www.rc.gc.ca/visitors](http://www.rc.gc.ca/visitors).

#### Electricity

The electrical voltage in Canada is 110 V, 60 cycle ac. Adapters can be found at most electrical stores nearby.

### Transportation

There are a number of different options for travelling to and from Toronto's Lester B. Pearson International Airport:

#### **Airport Express Bus: (Airport to Downtown Toronto Service)**

Bus picks up on the Arrivals Level of all terminals. All buses are wheelchair accessible and also have front kneeling doors for easier access. This is a 24 Hour service. Destinations include the downtown bus terminal, as well as several major downtown hotels, **including the Delta Chelsea**. Connecting service to other downtown locations is also available for an additional fee.

**Fee schedule:** Downtown to LBPIA                      \$14.25 / return-\$24.50

Students and seniors receive 10% off one way fares.

For more information call Pacific Western Airport Express at (905) 564-6333 or toll free at (800) 387-6787 or visit the web site [www.torontoairportexpress.com](http://www.torontoairportexpress.com).

## Airport Limousines

Airport limousines and town cars are available for hire right outside the airport. Fares can range from \$58.00 Canadian to get from the airport to downtown Toronto, to \$48.00 Canadian to go from downtown to the airport.

## Toronto's Subway System (TTC):

### TTC - 192 Airport Rocket

Provides fully-accessible bus service. Buses stop only at Kipling station, Dundas Street & East Mall Crescent, Terminal 3 (Arrivals Level), and Terminal 2 (Arrivals Level). Service operates from approximately 5:30 a.m. to 12:30 a.m., seven days a week. One-way travel time is approximately 20 minutes.

### **Regular TTC fares apply, with full transfer privileges to and from other TTC routes.**

Adult cash fare is \$2.25

For more information call (416) 393-4636 or visit the web site

[www.city.toronto.on.ca/ttc/index.htm](http://www.city.toronto.on.ca/ttc/index.htm).

## Accommodation Information

Blocks of rooms have been reserved at the following hotels. All are within walking distance of the campus. **We urge you to make your hotel reservations as soon as possible. The Molson Indy is being held in Toronto, right after the OMCOS Conference ends. This event draws thousands of tourists into the city, and they often arrive the week before the event.**

Hotel	Rating	Single	Double	Triple
Park Hyatt Hotel 4 Avenue Road Toronto, Ontario M5R 2E8 Phone: 1-800-977-4197 Or (416) 925-1234 Fax: (416) 924-4933	5 *	\$230.00 CDN	\$230.00 CDN	
The Sutton Place Hotel 955 Bay Street Toronto, Ontario M5S 1A2 Phone: (416) 924-9221 Fax: (416) 924-1778	4.5*	\$189.00CDN	\$189.00 CDN	
Delta Chelsea Hotel 33 Gerrard Street West Toronto, Ontario M5G 1Z4 Phone: 1-800-CHELSEA Or (416) 595-1975 Fax: (416) 585-4375	4*	\$175.00 CDN	\$175.00 CDN	\$175.00 CDN
Quality Hotel 280 Bloor Street West Toronto, Ontario Phone: 1-800-228-5151	3*	\$119.00 CDN	\$119.00 CDN	\$119.00 CDN

Or (416) 968-0010

Fax: (416) 968-7765

Please make your reservation directly with the hotel of your choice by **June 1<sup>st</sup>, 2003**, quoting OMCOS-12. After June 1<sup>st</sup>, 2003, reservations will be accepted on a space and rate availability.

### Residence Information

Residence Name	Single	Double	Triple
Victoria University <b>(includes full breakfast)</b> 140 Charles Street West Toronto, Ontario Phone: (416) 585-4524/4522 Fax: (416) 585-4530 E-mail: <a href="mailto:accom.victoria@utoronto.ca">accom.victoria@utoronto.ca</a>	\$47.00 CDN (plus 12% tax)	\$67.00 CDN (plus 12% tax)	
New College Residence 40 Willcocks Street Toronto, Ontario Phone: (416) 978-8877 Fax: (416) 946-7169 E-mail: <a href="mailto:summer.newcollege@utoronto.ca">summer.newcollege@utoronto.ca</a>	\$42.00 (plus 12% tax)	\$35.00 CDN per person (plus 12% tax)	

**both prices include a full breakfast**

### Social Program

Those who are interested in the excursion program are asked to make reservations on the Registration Form. Advanced payment is required for the excursions.

Welcome Reception – Great Hall at Hart House

Date: Sunday, July 6th

Time: 6:30 – 8:30 PM

Fee: Free of charge for all registered participants and accompanying persons. The reception will be held at Hart House, on the University of Toronto campus.

Conference Banquet

Date: Wednesday, July 9th

Time: 7:00 PM

Fee: \$75.00 US Dollars

You are warmly invited to join this Conference Banquet, which will be held at the Liberty Grand Entertainment Complex. Standing majestically on Toronto's downtown lakefront, the Liberty Grand is the crown jewel of Exhibition Place. Originally constructed in 1926, this building has an impressive heritage. It has recently been restored to its 1920's splendor. If the weather permits, the reception will be held in the beautiful courtyard garden.

Buses will transport you from Hart House to the Liberty Grand, and then return you to Hart House.

Optional Tours:

McMichael Art Collection and Lunch

Date: Monday, July 7, 2003

Fee: \$50.00 US Dollars

This trip will take the participants to Kleinburg to visit the McMichael Collection, featuring the art of Canada's world-renowned group of seven artists. Set amidst a tranquil treed and garden setting, the McMichael collection captures the beauty of the Canadian wilderness on canvas in bold and unique styles. The participants will also be taken to the centuries old Dr's House for a nice lunch. Capping off the day will be a stop at the Woodbine Centre. This unique shopping experience features over 150 stores and has a fully operational carnival, complete with rides, set within its walls. (Approx. 6 hrs.)

#### Muskoka Tour

Date: Tuesday, July 8, 2003

Fee: \$80.00 US Dollars

This tour travels north to Muskoka with a refreshment stop. On to Gravenhurst in the heart of Muskoka, where we proceed to the market on the pier. Many local artisans and farmers display their wares and produce at this delightful lakeside market. Then we'll walk across the pier and board the Lady Muskoka for a Muskoka lakes cruise and three-course lunch. Marvel at the million dollar cottages and boat houses that adorn the shoreline. See the summer homes of the rich and famous, from Goldie Hawn and Kirk Russell to Martin Short. We will depart the lovely Muskoka's and stop for a refreshment pause at Hwy. 89 before returning. (Approx. 8 hours)

#### Niagara Falls, Niagara on the Lake, Winery Tour and Dinner – Option 1

Date: Wednesday, July 9, 2003

Fee: \$60.00 US Dollars

The bus departs for Niagara Falls for a sight seeing visit complete with a box lunch. The tour then moves over to Niagara on the Lake for shopping and sight seeing. A full winery tour complete with dinner will wrap up the day before returning to the conference hotel. (Approx. 8 hours)

#### Niagara Falls Tour – Option 2

Date: Wednesday, July 9, 2003

Fee \$24.00

This tour departs to Niagara Falls for a sight seeing visit at the falls. Free time is then provided for each person to spend the afternoon shopping or enjoying the rides, casino and attractions of Niagara Falls. (Approx. 6 hours)

### **Organizing Committees**

### **International Advisory Board**

Irina Beletskaya

Daniel Bellus  
Pierre Dixneuf  
Jean-Pierre Genet  
Reinhard Hoffmann  
Gerard van Koten  
Bruce Lipshutz  
T.Y. Luh  
Armin de Meijere  
Shun-ichi Murahashi  
Ei-ichi Negishi  
Alfredo Ricci  
Hisashi Yamamoto

### **National Advisory Committee**

Howard Alper  
Andre Charette  
Rick Friesen  
Mark Lautens  
Edward Piers

Symposium Chairman

Professor Mark Lautens  
Department of Chemistry  
University of Toronto  
80 St. George Street  
Toronto, Ontario  
CANADA  
M5S 3H6

Symposium Co-Chairman

Rick Friesen  
Merck Frosst Canada

Hamilton, Ontario  
CANADA

### **Local Organizing Committee**

Rob Batey  
Eric Fillion  
Rick Friesen  
William Tam

### **Conference Secretariat**

Sue McClelland, Conference Secretariat  
Department of Chemistry  
University of Toronto  
80 St. George Street  
Toronto, Ontario  
CANADA  
M5S 3H6  
Phone: (416) 978-6031  
Fax: (416) 978-1631