General Assembly Trip Report

<u>A. General Information</u>

1. International Affiliation:

International Union for Crystallography

2. Date and Location of General Assembly Attended:

Aug. 21- 28, 2017 Hyderabad International Convention Centre, Hyderabad, India

3. Periodicity between General Assemblies (in years):

3 years (last meeting: 2014; next meeting: 2020)

4. Date and Location of next General Assembly:

Prague, Czech Republic

5. How many CNC Delegates attended/participated? :

3 delegates, 1 alternate

Louise Dawe (*chair*, *Canadian delegation*) Department of Chemistry and Biochemistry, Wilfrid Laurier University

Pawel Grochulski (*delegate*) Canadian Light Source

Tomislav Friščić (*delegate*) Department of Chemistry, McGill University

Patrick Mercier (*alternate delegate*) National Research Council Canada

- 6. How many Canadians were invited to speak/present? :
 - 2 invited keynotes9 oral presentations/lectures12 poster presentations4 microsymposia co-chairs
- 7. How many Canadian delegates (generally) attended/participated? :

25 Canadians were officially registered on June 28, 2017

B. Canadian Participation/Engagement

- 1. Were any Canadians nominated to any vacancies on the International Affiliation's Executive Committee? (Y/N): Y
- 2. If yes, who was nominated? Were any of these nominations successful?

Hanna Dabkowska (McMaster University), Nominated for Vice-President of the Union, Successful

Pawel Grochulski (Canadian Light Source), Nominated as Ordinary Member of the Executive Committee, Unsuccessful

- 3. Were any Canadians nominated to sit/participate on any standing committees, working groups or other affiliated bodies? (Y/N): Y
- 4. If yes, please provide brief details of who was nominated and to which committee or body. Were any of these nominations successful?

Successful Commission Nominations of Canadians

- P. Mercier (Canada), Commission on Inorganic and Mineral Structures, Chair
- P. Grochulski (Canada), Commission on Synchrotron and and XFEL Radiation, Chair
- P. Grochulski (Canada), Commission on Biological Macromolecules, Member
- C. Matta (Canada), Commission on Quantum Crystallography, Member
- P. Mercier (Canada), Commission on Crystallographic Computing, Member
- H. Young (Canada), Commission on Electron Crystallography, Member

R.E. Wasylishen (Canada), Commission on NMR Crystallography and Related Methods, Member

D. Bryce (Canada), Commission on NMR Crystallography and Related Methods, Member

Other: ICSU Committee on Space Research (COSPAR) Representative: H.A. Dabkowska (Canada)

5. Did Canada bid to host an upcoming General Assembly, or interim conference associated with the international affiliation?

The 2014 General Assembly was hosted in Montreal, Canada. As such, Canada did not bid to host an upcoming General Assembly, or interim conference associated with the international affiliation.

6. If yes, was this bid successful? And when and where will it be held?

Not applicable.

C. Key Affiliation Discussions/Decisions

1. Were any key decisions made regarding the direction of the International Affiliation moving forward? If so, what were these? (Point form please)

(i) *Statement on Gender Balance*: The IUCr executive committee acknowledged that there is a gender diversity problem with respect to representation of females at the 2017 Congress, on commissions, and in editorial positions for Union journals. In this respect, a statement has been crafted that will see the IUCr adopt procedures to promote gender balance in these areas.

(ii) *Creation of WH & WL Bragg Prize:* A new award will be created to recognize the contributions of an outstanding early career researcher.

(iii) *IUCr Associates Programme:* IUCr officially launched its new voluntary Associates Programme at the Hyderabad Congress. The Programme offers a series of benefits and tools to help Associates network, share ideas and discover more about crystallography. In addition, those who join will be supporting the IUCr in its many charitable activities, such as sponsoring international meetings and schools and its OpenLabs initiative.

(iv) Budget estimates for period to Twenty-Fifth General Assembly: determination of unit contribution. The Unit Contribution will remain at its current level. This Contribution was set at the Beijing meeting in 1993, 24 years ago.

2. Did any Canadian delegates actively participate in the discussions? Propose options?

As an executive committee member H.A. Dabkowska was involved in these proposals. Canadian delegate members voted in favour of the two actionable items (Statement on Gender Balance and Creation of WH & WL Bragg Prize.)

3. Will any of these changes impact the Canadian research community? If so, briefly indicate how.

The general direction foreseen by the creation of a Statement on Gender Balance, the Creation of the WH & WL Bragg Prize (for early career researchers), and the recommendation that the unit contribution remain unchanged, is one of greater diversity and inclusivity. This may lead to greater participation by the Canadian research community in the future, with resulting recognition, collaborations, etc...resulting from these measures.

4. Did Canadian engagement lead to an outcome that will provide tangible benefit to the Canadian research Community, Canadian Reputation, Canadian National interests? If so, please provide brief details.

Hanna Dabkowska (McMaster University), was elected Vice-President of the Union. This will increase Canadian visibility and reputation in the international crystallographic community.

D. Dissemination/Communication to Canadian stakeholder community

1. Was the Canadian stakeholder community consulted on any issues being addressed, prior to the participation in the GA? If so, how, and on what specific issues or areas?

National affiliates were solicited for nominations to commissions, and for comments on the proposed merger for ICSU.

2. How will the information obtained at the GA be disseminated to the broader Canadian stakeholder community?

This report can be made available on the Canadian National Committee for Crystallography website: http://xtallography.ca/

E. Other Comments

Documents related to the General Assembly can be obtained from: <u>http://www.iucr.org/iucr/governance/ga</u>

Minutes taken by Louise Dawe, during the General Assembly, have been attached.

Canadian activities at the associated Congress have been attached.

Two invited-lecturers reported difficulty in obtaining visas to enter India, and were unable to attend in person.

Trip Report Author: Louise Dawe, Chair of the Canadian Delegation to the XXIVth General Assembly in Hyderabad, India.

Date: Final report completed on Sept. 17, 2017

CANADIAN ACTIVITES AT THE XXIV CONGRESS AND GENERAL ASSEMBLY OF THE IUCr, Hyderabad, India, August 2017.

22-08-2017

Keynote: Prof. Farideh Jalilehvand, University of Calgary, "X-ray Absorption Spectroscopy and Chemical Speciation: from Archaeology to Biology "

Keynote: Prof. David Bryce, University of Ottawa, "Structure and properties of materials by solidstate nuclear magnetic resonance (SSNMR) observables"

Oral Presentation - Dr John Rodgers, NH2 LLC, "A Cognitive Computing Environment for Materials Research" in MS-0006

Prof. Louise Dawe, Wilfrid Laurier University, co-chair for MS-016 "New approaches in crystallographic teaching"

Posters

#6 Larry Calvert student award winner - Naheda Sahtout, U. Saskatchewan "The thioredoxin system from Thermosiphoafricanus: structure and function."

#9 Dr Guennadi Kozlov, McGill U. "PRL phosphatases and their interactions with CNNM magnesium transporters"

#27 Larry Calvert student award winner - ThirumalaiSelvi Ulaganathan U. Saskatchewan "Structural And Functional Characterization Of Ulvan Lyase Enzymes"

23-08-2017

Posters

#5 Matthew Daniel McDougall, U. Manitoba "The Regulatory Function of Netrin-4 and Interactions with Netrin-1 Receptors"

#19 Dr Jacinthe Gagnon, post-doc at INRS - Institut Armand-Frappier "Human Ribonuclease 6 Crystal Structure and Conformational Analysis"

#46 Dr Manish Kumar Mishra, post-doc at McGill U. "Crystallographic Analysis of Ionic Liquids"

#94 Dr Dayaker Gandrath, McGill University "Solid-state mechanochemical synthesis of thio-ureido acids"

24-08-2017

Dr. Patrick Mercier, National Research Council Canada, co-chair MS-052 "Minerals/gems in industrial applications"

Dr. Natalie Strynadka, University of British Columbia, co-chair MS-054 "Mechanisms of bacterial resistance"

Oral Presentation - Prof. Louise Dawe, Wilfrid Laurier University, "Teaching Undergraduates about Structure Using Database Examples" in MS-045

Oral Presentation - Prof Albert Marinus Berghuis, McGill University, "Structural studies of clinical resistomes" in MS-054

Posters

#9 Dr Trushar Patel, U. Lethbridge "Netrin4 and laminin gamma-1 interacts via their N-terminal globular domains"

#104 Prof. Louise Dawe, Wilfrid Laurier University "Thiourea based-ligands: intergrown polymorphs"

25-08-2017

Oral Presentation - Prof Chérif Matta, Mount Saint Vincent University, "Localization-Delocalization Matrices: Bridging QTAIM and Chemical Graph Theory" in MS-057

Oral Presentation - Prof Catherine Natalie Strynadka, University of British Columbia, "Structure based analysis of the Type III Secretion Injectisome" in MS-081

Oral Presentation - Prof Tomislav Friscic, McGill University, "Minerals with Metal-Organic Framework Structures" in MS-065

Oral Presentation - PhD Candidate Arnab Majumdar spoke for Prof John S Tse, University of Saskatchewan, on "Novel Modulated Structure of Superconducting Hydrogen Sulfide" in MS-069

Posters

#54 Dr Patrick H. J. Mercier, NRC, "Flexibility of dehydrated zeolite-X pores quantified by quantum modeling"

26-08-2017

Oral Presentation - Larry Calvert Student Award Winner Jenna Marie Skieneh, Western University, "Exploring cocrystallization of Curcumin" in MS-075

Posters

#122 Dr Pawel Grochulski, Canadian Light Source Inc., "Celebrating the 10th anniversary of CMCF operations"

27-08-2017

Dr. Hanna Dabkowska, McMaster University, co-chair MS-095 "MS-095: Crystallography for Space Sciences"