

CCIIW Visit Report – Philip Bates

31 July 2012

Subject: Annual Assembly of the IIW, 9-10 July 2012, Denver USA

I had the pleasure of attending Commission XVI (Polymer joining and adhesive technology) sessions during the Annual Assembly of the IIW on 9-10 July 2012 in Denver Colorado USA. Approximately 20 representatives from Canada (1), Germany (10-15), United States (1), Czech Republic (1), Brazil (1) and Finland (1) came to the two sessions. This is slightly above average for Commission XVI. The chair was Dr. Volker Schöppner of Kunststofftechnik Paderborn (D).

The Commission was organized much like a conference with approximately 6-7 papers given per day. Again, this is more than average. I authored and presented one of these papers. The schedule is appended. My first paper was recommended for peer-review in *Plastic in the World*. However I declined. There are two reasons for this: (i) There is a large backlog of papers that are under review for *Welding in the World*. One of my papers from Chennai has not yet been reviewed. (ii) The journal's impact factor of 0.3 compares unfavourably with other similar journals such as *Science and Technology of Welding and Joining* (1.74). For reference, *Nature* has an impact factor of 36.2. IIW needs to address these issues.

This year, for the first time in recent memory, Commission XVI attracted enough delegates and papers to compete with the welding/joining sessions of Conferences such as the Society of Plastic Engineers' ANTEC. In addition, it provided more possibilities for in-depth discussion during the longer and more informal presentations. I very much enjoyed these debates. From an academic viewpoint, it was good to see that work done in Canada rates favourably with research done by the German Universities who, without a doubt, are the strongest in the world in the polymer welding area

The work started in Dubrovnik on developing polymer welding terminology has stalled. We are still waiting for the DVS organization to propose a draft for review. It is hoped that this work can restart in 2013. I will be attending the Annual Assembly and International Conference of the IIW in Germany in 2013. I would again like to be the Canadian Delegate for Commission XVI. Please let me know what I would need to do for this to happen.

I would also like to take this opportunity to thank the CWB for assisting with the costs associated with attending the IIW Annual Assembly. I very much appreciate their financial support. I will be sending you another installment on the welding of plastics.

Best regards,



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Commission XVI – Polymer Joining and Adhesive Technology

XVI-924-12

Agenda for the Meeting of Commission XVI

65th International Institute of Welding Annual Assembly Denver

Author: V. Schöppner (Chairman)

Monday, July 09th, 2012, 14:00 – 18:00

1. Opening and welcome by the session chairman, Volker Schöppner (University of Paderborn, Germany)
2. Registration of delegates, experts and observers
3. Approval of the Agenda (Doc. XVI-924-12)
4. Presentation of papers
 - 4.1. XVI-925-12: "WELDING OF PLA" by D. Grewell , J. Vogel from Iowa State University, USA
 - 4.2. XVI-926-12: "ADHESIVE JOINING OF PCD CUTTING SEGMENTS ONTO A SAW BAND IN RESOURCE EFFICIENT CUTTING OF MINERAL MATERIALS" by D. Kohl, S. Böhm from University of Kassel, Germany
 - 4.3. XVI-927-12: "ADHESIVE STUDS BASED ON RADIATION-CURED ADHESIVES" by S. Süllentrop, G. Meschut from University of Paderborn, LWF, Germany
 - 4.4. XVI-928-12: "THE EFFECT OF CLAMPING STRESS ON THE FATIGUE STRENGTH OF BONDED HIGH STRENGTH STEEL INTERFACES" by S. Hurme, G. Marquis from Aalto University, Department of Applied Mechanics, Finland
 - 4.5. XVI-929-12: "THE AGEING PROCESS OF ATMOSPHERIC PRESSURE PLASMA TREATED THERMOPLASTICS – CHARACTERIZATION OF SURFACE PROPERTIES", by Ch. Budde, Ch. Leister, E. Moritzer, University of Paderborn, KTP, Germany
 - 4.6. XVI-930-12: "FRICRIVETING OF ALUMINIUM 2024-T351 AND POLYCARBONATE: TEMPERATURE EVOLUTION, MICROSTRUCTURE AND MECHANICAL PERFORMANCE" by C.F. Rodrigues, S.T. Amancio-Filho, J. F. dos Santos, L. B. Canto, E. Hage from Helmholtz Zentrum Geesthacht and University of Sao Carlos, Germany and Brazil



Tuesday, July 10th, 2012, 14:00 – 18:00

5. Approval of the Annual Report of the meeting at Chennai (Doc. XVI-920-11)
6. Late Documents
7. Other Business
8. Presentation of papers
 - 8.1. XVI-931-12: tbd by Ph. Bates, Canada
 - 8.2. XVI-932-12: „ULTRASONIC WELDING OF HYGROSCOPIC PLASTICS – INFLUENCE OF HUMIDITY ON THE WELDING PROCESS“ by A. van Aaken, Ch. Hopmann from RWTH Aachen, IKV, Germany
 - 8.3. XVI-933-12: “MONITORING AND DAMAGE DETECTION OF ADHESIVE BONDS BY MICROENCAPSULATED MARKERS” by H. Thiede, F. Koerte, M. Kahlmeyer, R. Faust, S. Böhm from University of Kassel, Germany
 - 8.4. XVI-934-12: SURFACE AND ADHESION PROPERTIES OF POLY(IMIDE-SILOXANE) BLOCK COPOLYMERS by I. Novák, M. Maronek, P. Sysel, A. Popelka, I. Chodák, M. Špírková, from different research groups in Slovakia and Czech Republic
 - 8.5. XVI-935-12: “MECHANICAL AND FAILURE BEHAVIOUR OF PA66-FG / AA2024 ICL JOINTS” by A.B. Abibe, S.T. Amancio-Filho, J.F. dos Santos, E. Hage from Helmholtz Zentrum Geesthacht and University of Sao Carlos, Germany and Brazil
 - 8.6. XVI-936-12 tbd by N. Friedrich, V. Schoeppner from University of Paderborn, KTP, Germany
 - 8.7. XVI-937-12 “FRICTION SPOT JOINING OF ALUMINUM 6181-T4 AND CARBON FIBER REINFORCED PPS: EFFECTS OF PROCESS PARAMETERS ON MICROSTRUCTURE AND STRENGTH” by J. V. Esteves, S.T. Amancio-Filho, J. F. dos Santos, L. B. Canto, E. Hage from University of Sao Carlos, Germany and Brazil
9. Resolutions and Decisions
10. Call for Papers for 66th Annual Assembly Meeting July 08-13, 2013 Essen, Germany (Doc. XVI-938-12)