



The Institute of Materials, Minerals & Mining

BIOMEDICAL APPLICATIONS DIVISION ANNUAL REPORT FOR 2016

1. Board membership

1. Chairman Prof Andrew Lewis, Biocompatibles UK plc
2. Secretary Dr Gabriela Juarez Martinez, KTN Limited
3. Mr Brian Kent, Independent
4. Dr David Farrar, Xiros Limited
5. Dr Geoffrey Andrews, CEO, Ranier Technology
6. Professor John Nicholson, Bluefield Centre for Biomaterials Ltd
7. Prof Jonathan Knowles, UCL
8. Dr Jie Huang, UCL
9. Dr Julian Braybrook, LGC
10. Dr Julian Jones, Imperial College
11. Prof Lucy Di Silvio, Kings College London
12. Prof Matteo Santin, University of Brighton
13. Dr Mino Esat, Independent Consultant
14. Dr Mura McCafferty, Ulster University
15. Prof Neil Rushton, Cambridge
16. Prof Pankaj Vadgama, Director, Biomedical Materials IRC, Queen Mary University of London
17. Prof Paul Hatton, University of Sheffield
18. Prof Rachel Williams, University of Liverpool
19. Dr. Sarah Ashwood, EPSRC
20. Prof Serena M Best, University of Cambridge
21. Mrs Sue Dunkerton, KTN Limited
22. Prof William Bonfield, Cambridge

IOM3 Staff

Geoff Hale, IOM3

2. Board meetings

22 January 2016, 297 Euston Road, London NW1 3AQ

Attendees (12)

Andrew Lewis

Brian Kent

Gabriela Juarez Martinez

Geoffrey Andrews

Jie Huang

Julian Jones

Matteo Santin

Mino Esat
Mura McCafferty
Paul Hatton
Sarah Ashwood
Serena Best

12 May 2016, 297 Euston Road, London NW1 3AQ

Attendees (5)
Andrew Lewis
Brian Kent
Jie Huang
John Nicholson
Pankaj Vagdama

21 September 2016, 297 Euston Road, London NW1 3AQ

Attendees (12)
Andrew Lewis
David Farrar
Gabriela Juarez Martinez
Jie Huang
John Nicholson
Jonathan Knowles
Julian Jones
Matteo Santin
Mino Esat
Neil Rushton
Pankaj Vagdama
Paul Hatton

3. Activities during 2016

3.1. Technical Programme

Past Meetings

Biomaterials 2016, London March 2016. IOM3 is sponsoring this meeting
Summary; details in Appendix

Future Meetings

RSC – Biomaterials Chemistry Special Interest Group Annual Meeting. University of Ulster, Belfast, 11-12 January 2017. IOM3 co-sponsored this meeting.

3.2. Web-site developments

The BMAD division has updated their board members and this has been reflected in the microsite.

3.3. Engagement with technical community and/or local societies

A selection of the BMAD committee (Profs Best, Williams and Lewis) along with additional invited speakers presented at an IOM3 Schools Affiliate Scheme sponsored Teachers Conference on the 29th June 2016: Biomaterials: Bionic Man, Fact or Fiction? Approximately 30 people attended and feedback was excellent.

At the request of the President of the European Society for Biomaterials, Prof Matteo Santin (also a BMAD Committee Member), the Committee was involved in the dissemination of a

questionnaire prepared by Ingenio (University Polytechnic Valencia) on behalf of the ESB, that may help enable the mapping of biomaterial research translation across Europe. Membership were emailed with the link to the questionnaire and an initial overview of the results were provided to the membership by Prof Santin. The report was useful in identifying hot-spots of Biomaterials R&D across Europe and where centres had particular expertise.

3.4. Contributions to IOM3 house journals

Paul Hatton and Katie-Jo Harwood of the BMAD Committee provided an article for the July Edition of Materials World on “The Bio Revolution”. In the same issue Julian Jones provided an article on Bioglass in memory of Larry Hench. Andy Lewis also provided an article on the Biomaterials (R)Evolution which was used for additional content for the app version of Materials World.

3.5. Acknowledgments

Prof. Irene Turner retired from the committee in August 2016. The BMAD committee acknowledges and thanks her contributions; Irene together with Prof William Bonfield established the first Biomaterials Committee within the IOM3.

In 2016 the committee recommended David Farrar as a nominee for the Chapman Medal for his contributions to the biomaterials field.

3.6 Other

3.5.1. Foresight/ Innovation and Growth

Sue Dunkerton remains an active member of the EPSRC Healthcare Technologies SAT and will continue to provide a conduit for BMAD feedback on policy for the RC. Rachel Williams has been appointed to the SAT with effect from April 2015 for 4 years.

Sue Dunkerton and Gabriela Juarez Martinez continue to provide the link to the KTN activities.

4. Strategy and Objectives for 2016 and Beyond

4.1. Opportunities and Constrains

The BMAD Committee is small compared to other Divisions within the IOM3 and our ability to organize large meetings is very limited. The Chairman declared an interest in focusing the BMAD on outreach over the next few years and there are a number of committee members with an interest in this area. This will be one of our areas of focus in the coming years and we hope to continue to provide support regarding school visits, teacher conferences, presentations and on-line educational content.

4.2. Specific targets for 2016

Of the specific targets we set for 2016, The Chairman reviewed the BMAD committee membership and reduced the number of members to 22 who have attended board meeting regularly over the past few years. It has been recognized during 2016 that this may be too few to guarantee enough attendance at each meeting and some newer members are being sought to help inject new ideas.

The Committee did not manage to run a meeting in the Mine during 2016 although there were two attempts made by Prof Best and Dr Esat but for various reasons these did not come to fruition. The Committee will need to work closely with the IOM3 to make this process simpler and ensure meetings can be held without too much complexity.

Our final target was to provide articles for Materials World which we achieved in the July edition as well as for the app version.

4.3. Outline plans for the 4 years beyond 2017

The plans for the activities in 2017 and beyond remain as per last year with the Committee wishing to continue to expand its out-reach activities and more effort will be made over the coming years to be involved in activities that will stimulate grass-roots interest in biomaterial science. The intention will be for the committee to generate a presentation that will be available for the Schools Affiliate Scheme as a Biomaterials Resource for school use. The committee will need to work closely with Diane Aston to ensure the content is relevant to the school syllabus.

We will also be undertaking a review of related societies and groups and ensuring we are connected to these and their activities in the field so that we can most broadly represent our discipline. Initial approaches are to be made to the RSC Biomaterials group and the UK Society for Biomaterials.

5. Appendix: Technical Programme as of December 2016

Date	Status (Held /Progressing /Planned)	Title	Location	Organising Division(s) /Committee(s) /Collaborators	Financial Underwriter (IOM3/ Local/ Other)	100% Target No's	Actual No's
March 2016	Held	Biomaterials 2016	London	BMADiv	Sponsor	~50	50
January 2017	Held	RSC 2016	Belfast	BMADiv	Co-badged	100	~100