Eleventh International Conference on Fundamentals and Industrial Applications of HIPIMS
9 - 10 November 2020, Sheffield, UK
Venue: Cutlers’ Hall

Conference Announcement and Call for Papers
**Invitation to participate**

Following a number of successful years, the Joint Sheffield Hallam University - Fraunhofer IST HIPIMS Research Centre is pleased to invite you to the eleventh edition of the International Conference on HIPIMS.

The conference goals are to:

- promote High Power Impulse Magnetron Sputtering (HIPIMS) as a novel manufacturing technology for surface modification and coating deposition
- provide a scientific forum for discussion of the fundamentals of plasma science
- exchange ideas for new industrial applications of HIPIMS
- connect the academic research community with the industrial world to foster progress of plasma-based technologies.

Sheffield is one of the largest cities in UK and as the birthplace of stainless steel has a long history of innovation in materials science and industry. Sheffield Hallam University is leading the way in scientific understanding and industrial implementation of HIPIMS for a range of applications and is said to be the most in-depth facility in this field. The University has provided a home for Industrial HIPIMS for many years and hosted the National HIPIMS Technology Centre in the UK since 2014. We are strengthened by our collaboration in the Joint Sheffield Hallam University - Fraunhofer IST HIPIMS Research Centre - the first of its kind in UK. We strive to contribute to society through our partnership with the High Value Manufacturing Catapult - one of the largest catalysts for future growth and success of manufacturing in the UK.

The Coat of Arms of the Company of Cutlers
Conference Committees

International Organising Committee
Prof. G. Bräuer Fraunhofer IST, Braunschweig, DE
Dr. D. Doerwald Hauzer TechnoCoating, Venlo, NL
Prof. P. Hovsepian Sheffield Hallam University, Sheffield, UK
Prof. G. van der Kolk IHI IonBond, Venlo, NL
Dr. J. Lansbergen IHI Ionbond, Venlo, NL
Dr. P. Ozimek Trumpf Huettinger Electronic Sp. z o.o., Warsaw, PL

Organisers

Sheffield Hallam University
National HIPIMS Technology Centre UK
SEAC Self-Engineering Associated Centres
CATAPULT High Value Manufacturing
INPLAS
Fraunhofer IST

Tutorial Courses Provided by
Society of Vacuum Coaters

Promoted and Approved by
European Joint Committee on Plasma and Ion Surface Engineering
The British Vacuum Council

Prof. A. Anders IOM Leipzig, DE
Prof. P. Awakowicz Ruhr-Universität Bochum, DE
Dr. R. Bandorf Fraunhofer IST Braunschweig, DE
Prof. P. Barna Hungarian Academy of Sciences Budapest, HU
Prof. G. Bräuer Fraunhofer IST Braunschweig, DE
Prof. W. Cranton Sheffield Hallam University, UK
Prof. W. Diehl, DE
Prof. A. P. Ehiasarian Sheffield Hallam University Sheffield, UK
Prof. P. Hovsepian Sheffield Hallam University Sheffield, UK
Dr. T. Hurkmans IHI IonBond Venlo, NL
Prof. I. Petrov University of Illinois at Urbana-Champaign, USA
Prof. J. Schneider RWTH Aachen, DE
Prof. S. Turner High Value Manufacturing Catapult, UK
Prof. J. Vlcek University of West Bohemia Plzen, CZ
Topics of HIPIMS 2020

HIPIMS 2020 will provide a forum for presenting the latest research by scientists and engineers from industry, engineering institutes and academia. Contributions will cover fundamental scientific aspects as well as application-oriented research and development. In addition, successful introduction to market of new products utilising HIPIMS will be addressed.

HIPIMS 2020 will focus on the following topics:
- Generation of HIPIMS and highly ionised plasmas
- Plasma diagnostics and discharge physics
- Coating characterisation and performance
- Reactive and non-reactive HIPIMS processes
- Simulation of HIPIMS processes
- HIPIMS systems and hardware

Call for Papers

As a truly international conference, HIPIMS 2018 will present the most recent results of scientific research as well as new applications in the field of HIPIMS technology. If you wish to present your latest research results or you have developed a new application, your contribution will be very welcome. We encourage you to submit your abstract to:

hipims@shu.ac.uk

Abstracts (max. 1 page incl. illustration) should be written in English and should include name, address and e-mail of the contact author.

The scientific committee will review all incoming contributions. Depending on the topic, the committee will assign the paper for oral or poster presentation.

Conference Deadlines
Submission of one page abstract: 18 September 2020
Acceptance notification: 25 September 2020
Young Scientist Award Manuscript Submission: 4 November 2020
**SVC Tutorial Courses**

The Society of Vacuum Coaters is presenting three tutorial courses. Take advantage of learning from these outstanding, internationally recognized instructors and getting answers to your practical vacuum coating problems.

**Monday, 22 June** - full day  
**SVC C-323**: High Power Impulse Magnetron Sputtering  
**Prof. Arutiun P. Ehiasarian**  
Sheffield Hallam University, Sheffield, UK  
**Prof. Andre Anders**  
IOM Leipzig, Germany

**Tuesday, 23 June** - half day, morning  
**SVC C-338**: Application of Reactive Sputtering  
**Dr. Ralf Bandorf**  
Fraunhofer IST, Germany  
**Mr. Holger Gerdes**  
Fraunhofer IST, Germany

**Tuesday, 23 June** - half day, afternoon  
**SVC C-333**: Practice and Applications of HIPIMS  
**Dr. Ralf Bandorf**  
Fraunhofer IST, Germany  
**Prof. Arutiun P. Ehiasarian**  
Sheffield Hallam University, Sheffield, UK

**Tutorial Course Fee:**

- **Full rate:**  
  - **C-323**: £300  
  - **C-333 and C-338**: £150

- **Full-time Students**  
  - **C-323**: £100  
  - **C-333 and C-338**: £60

Register for both Tutorials and receive a 10% total discount. The tutorial course fee includes printed notes. The tutorial schedule is 8:30am - 4:30pm for C-323, 8:30am - 12:00pm for C-338 and 1:00pm - 4:30pm for C-333. To view the topical outline, description and detailed syllabus for these tutorial courses, visit the SVC Web Site at [http://www.svc.org/Education/SVC-Education-Program.cfm](http://www.svc.org/Education/SVC-Education-Program.cfm)

Register for these tutorial courses when registering for the conference.

**Contact (for tutorial course information)**

**Mr. Frank Zimone**  
Tel.: +1 505 897-7743  
SVC Executive Director  
Fax: +1 866 577-2407  
Society of Vacuum Coaters  
svcinfo@svc.org  
P.O. Box 10628 | Albuquerque, NM 87184 USA
Conference Fees
Industry  GBP 450
Academia  GBP 350
Students  GBP 130
Exhibition  GBP 200

The conference fee includes all technical sessions, book of abstracts, lunches, coffee breaks and the official conference dinner.

Contact (submission of Abstract)
Prof. Arutiun P. Ehiasarian | Sheffield Hallam University
Phone: +44 114 225 3500
City Campus
Howard Street
Sheffield, S1 1WB, UK

hipims@shu.ac.uk

Exhibition
Company participation has always been at the heart of this event with exhibits which are held in parallel with the conference and are in the immediate vicinity of the lecture theatre. Take the opportunity to present your products and services with precision to your target audience. Make valuable contacts. During the conference you will be exposed to key players in the industry accurately, concisely and with a minimum expenditure. We are looking forward to welcoming you here.

Contact (Exhibition and Sponsoring)
Prof. Papken Eh. Hovsepian | Sheffield Hallam University
Phone: +44 114 225 3500
City Campus
Howard Street
Sheffield, S1 1WB, UK

hipims@shu.ac.uk

Sponsorship Opportunities
As a sponsor, your company or organisation gains a clear presence within a select circle of participants. During the event we offer a number of possibilities to position your company and connect with potential customers. Take advantage of sponsoring HIPIMS 2020 to address an existing target group, and to enhance your profile in a new industry. Please contact us if you would like to join the group of sponsors.
Experience Sheffield

With a population of 600'000, Sheffield is one of the largest in UK and one of the main cities in the County of Yorkshire. Founded by Anglo-Saxons before 9th century, Sheffield's growth came about during the Industrial Revolution when it became the centre for cutlery industry in the country. Inventions of high adhesion Sheffield Plate, crucible steel, stainless steel, 18/8 steels and the first industrial production of steel by the Bessemer conversion process all originated in Sheffield and are featured in the Kelham Island Industrial Museum.

Town Hall 1897

Winter Gardens 2003

Historical buildings, theatres, gardens and the natural beauty of the Peak District - Britain's first national park - are all within easy reach.

Tilt Hammer
Abbeylea Industrial Hamlet 1785

Steam Engine - Kelham Island Museum

HIPIMS Discharge at Sheffield Hallam University 2003
Eleventh International Conference on Fundamentals and Industrial Applications of HIPIMS
9 - 10 November 2020, Sheffield, UK
Venue: Cutlers’ Hall

Looking forward to welcoming you in Sheffield!