Eleventh International Conference on Fundamentals and Industrial Applications of HIPIMS
16 - 18 June 2021, Sheffield, UK
Venue: Virtual

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 traditional scope of High Power Impulse Magnetron Sputtering plasma and coating technology is now expanded to include a broad range technologies for plasma coating, plasma surface treatments and non-plasma advanced surface engineering. 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. For 2021 we are pleased to welcome the Henry Royce Institute, the Institute of Materials, Minerals & Mining and the Surface Engineering Association to the organising committee to further strengthen the impact of HIPIMS for Industry and Academia.
Conference Committees

**International Organising Committee**
- Prof. G. Bräuer Fraunhofer IST, Braunschweig, DE
- Dr. D. Doerwald Hauzer TechnoCoating, Venlo, NL
- Prof. C. Herrmann Fraunhofer IST, Braunschweig, DE
- Prof. P. Hovsepiyan 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

**International Scientific Committee**
- Prof. A. Anders Leibnitz-Institute 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, Sheffield, UK
- Prof. W. Diehl, DE
- Prof. A. P. Ehiasarian Sheffield Hallam University, Sheffield, UK
- Mr. D. Elliot Surface Engineering Association, Birmingham, UK
- Prof. C. Herrmann Fraunhofer IST, Braunschweig, DE
- Prof. P. Hovsepiyan 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, Solihull, UK
- Prof. J. Vlcek University of West Bohemia, Plzen, CZ
- Prof. P. Withers Henry Royce Institute, Manchester, UK
- Prof. P. Xiao I.M3, Manchester, UK

**Organisers**

Prof. Arutiun P. Ehiasarian, Conference Chairman
Sheffield Hallam University,
Sheffield, UK

Dr. Ralf Bandorf, Conference Co-Chairman
Fraunhofer Institute for Surface Engineering and Thin Films, Braunschweig, DE

**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
**Topics of HIPIMS 2021**

HIPIMS 2021 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 2021 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

**Conference Deadlines**

Submission of one page abstract: **15 April 2021**

Acceptance notification: **29 April 2021**

Young Scientist Award Manuscript Submission: **24 May 2021**

**Call for Papers**

As a truly international conference, HIPIMS 2021 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.
**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, 14 June** - full day  
**SVC C-323**: High Power Impulse Magnetron Sputtering  
Prof. Arutiuon P. Ehiasarian  
Sheffield Hallam University, Sheffield, UK

**Tuesday, 15 June** - half day, morning  
**SVC C-338**: Application of Reactive Sputtering  
Dr. Ralf Bandorf  
Fraunhofer IST, Braunschweig, Germany  
**Mr. Holger Gerdes**  
Fraunhofer IST, Braunschweig, Germany

**Tuesday, 15 June** - half day, afternoon  
**SVC C-333**: Practice and Applications of HIPIMS  
Dr. Ralf Bandorf  
Fraunhofer IST, Braunschweig, Germany  
Prof. Arutiuon P. Ehiasarian  
Sheffield Hallam University, Sheffield, UK

**Tutorial Course Fee:**

- Full rate:  
  - C-323: GBP 200  
  - C-333 and C-338: GBP 100

- Full-time Students:  
  - C-323: GBP 60  
  - C-333 and C-338: GBP 40

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  
SVC Executive Director  
Tel.: +1 505 897-7743  
Fax: +1 866 577-2407

Society of Vacuum Coaters  
svcinfo@svc.org  
P.O. Box 10628 | Albuquerque, NM 87184 USA
Conference Fees
Industry  GBP 100  The conference fee includes all technical sessions and book of abstracts.
Academia  GBP 100  
Students  Free  
Virtual Exhibition  Free  
Charge  Free

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 (submission of Abstract)
Prof. Arutiuun P. Ehiasarian | Sheffield Hallam University
Phone: +44 114 225 3500  City Campus
Howard Street

hipims@shu.ac.uk  Sheffield, S1 1WB, UK

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

hipims@shu.ac.uk  Sheffield, S1 1WB, 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 2021 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.
Eleventh International Conference on
Fundamentals and Industrial Applications of HIPIMS
16 - 18 June 2021, Sheffield, UK
Venue: Virtual

Looking forward to welcoming you from Sheffield!