

Awards and Scholarship Committee Report

Martin Wüest Chair ECM-134

Zoom Meeting 18 March 2021



ASC Agenda

- Opening
- Attendance (from Christoph Eisenmenger-Sittner)
- Adoption of Agenda
- Minutes of ASC meeting during ECM-133 Shanghai virtual (Powerpoint)
- IUVSTA Elsevier Students Award
- IUVSTA Welch Scholarship
- IUVSTA Prize (Science and Technology)
- IUVSTA EBARA Award
- Peter Barna Award
- Any Other Business
- Closing Remarks
- Adjourn

Present Array of Awards

Character	Frequency	Undergraduate	Graduate	Post-doc	Established
Recognition	Every 3 years				IUVSTA Prize for Science IUVSTA Prize for Technology
Subsistence	Annually			Welch	
Semester abroad					
Conference Travel	Annually Select Conf.		Elsevier	Elsevier	
Research	Every 3 years			Ebara	
Conference	At ICTF every		Peter		
Presentation	3 years		Barna		



IUVSTA Elsevier Student Travel Award

			EUR	Contacted/On web/ Winners announced/
ICTF-2020	14-18 June 2020 postponed to 22-26 Nov 2020, 1 student to attend EVC-16 in Mars	Budapest, Hungary 5 students conf fee EUR 110=1650 + EU seille	2000 JR 350 ICTF	report written y/y/y/y
VASSCAA-10	11-15 Oct 2020 postponed to 11-14 Oct 2021, H IUVSTA received 15 Sept 2020 E	Shanghai, China ybrid Meeting JR 2000 as intermediary due the postp	2000 onement of V	y/y/n/n VASSCAA-10
EVC-16	30 May-4 June 2021 postponed to21-26 Nov 2021 Place holder for IUVSTA Elsevier	Marseille, France Award Announcement on web site	2000	y/y/n/n
ECOSS 36	Sept 2021 Now ECOSS 35 2020 postponed t No response from Organizing Cor	Luxembourg to most likely 30 Aug-3 Sept 2021 (virtua mmittee or Ludger Wirtz so far	2000 al meeting?)	y/n/n/n
IVC-22	11-16 September 2022 may be shifted to 9-14 July 2023	Sapporo, Japan	4000	y/n/n/n
			12000	



Eszter Bodnár Institute for Nuclear Research Debrecen, Hungary Grain boundary diffusion in thin Cu/Si//Si systems

Diogo Costa Physics Centre of the University of Minho Braga, Portugal Plasmonic response of thin films composed of noble metal nanoparticles dispersed in dielectric matrixes

Oleksandr Grynko Chemistry and Materials Science Program Lakehead University, Canada A multilayer Lead Oxide photoconductor for lag-free operation of X-ray digital detector

Szilvia Gulyás University of Debrecen Department of Solid State Physics Debrecen, Hungary Investigation of Fe-Pt based thin films

Gabriella Jáger University of Debrecen Department of Solid State Physics Debrecen, Hungary Designing embedded nanoparticle structures by ion-implantation

Laura Juhász University of Debrecen Department of Solid State Physics Debrecen, Hungary How to tune the plasmon resonance frequency of porous gold nanoparticles?

Tomas Lednicky Brno University of Technology Brno, Czech Republic, PDMS degradation monitored by the LSPR response of an embedded AuNPs array

Ameer R. K. Nassrah Research Institute for Solid State Physics and Optics Wigner Research Centre for Physics Budapest, Hungary Photoalignment at the nematic liquid crystal - polymer interface: the importance of the liquid crystalline molecular structure

15 IUVSTA-Elsevier Student Awardees 18th ICTF 2020 Budapest virtual

Petra Pál University of Debrecen Department of Experimental Physics Debrecen, Hungary Effect of the (geometrical) parameters of gold/silver nanoisland arrangements on their SERS properties

Lubos Podlucky Institute of Electronics and Photonics Bratislava, Slovak Republic Fabrication of progressive devices for microwave photonics

Ivana Šarić Ruđer Bošković Institute

Zagreb, Croatia Magnetron sputtering deposition of core/shell Ge/Al quantum dot lattices in amorphous Al2O3 matrix

Géza Szántó University of Debrecen Department of Experimental Physics Debrecen, Hungary Refractive index sensitivity of core-shell Ag@Au, Au@Ag nanoparticles

Ádám Szitas University of Szeged MTA Reaction Kinetics Research Group Szeged, Hungary Modification of h-BN nanomesh, template for adsorption and catalytic reactions

Vladimir Terek University of Novi Sad Faculty of Technical Sciences Novi Sad, Serbia High temperature tribological behavior of TiAIN and nanolayer TiAIN/TiSiN coatings deposited on various tool materials

Marija Tkalčević Ruder Bošković Institute

Zagreb, Croatia Ge quantum dot lattices in alumina prepared by nitrogen assisted deposition: structure and photoelectric conversion efficiency



IUVSTA Medard W. Welch International Scholarship Award



Medard W. Welch, 1st President of IUVSTA



2020 IUVSTA Welch Award Winner

Pierre Vinchon

Presently at University of Montreal, Canada Ph.D. expected 18 Dec 2020

Research stay with

Prof. Satoshi Hamaguchi Center for Atomic and Molecular Technologies, Graduate School of Engineering, Osaka University, Japan until 1 June 2021 (At this time it is not possible to enter Japan from Canada)



Experimental and theoretical examination of the specific roles of argon metastable atoms during Plasma Enhanced Atomic Layer Etching (PEALE) and Deposition (PEALD) of simple electronic materials



Vinchon Announcements

- IUVSTA Newsletter
- Twitter
- LinkedIn



Read about the 2020 Medard W. Welch Scholarship winner, Dr Pierre Vinchon, in the latest IUVSTA Newsflash.

https://lnkd.in/gP6n4fz

Übersetzung anzeigen

Microsoft Word - News flash 21 October 2020 -

iuvsta.org • Lesedauer: 2 Min.

IUVSTA NEWS FLASH Number: 21 October, 2020 Union Internationale Pour La Science, La...

🔿 2

 \bigcirc Gefällt mir \bigcirc Kommentar \rightarrow Teilen \checkmark Senden

Gehören Sie zu den Ersten, die dies kommentieren

	÷	Tweet
Explore	M	IUVSTA @iuvsta
Settings	It is a	our pleas

...

It is our pleasure to announce Dr. Pierre Vinchon as the 2020 Medard W. Welch Scholarship winner.

Dr. Vinchon will use his scholarship to work at the Center for Atomic and Molecular Technologies at Osaka University.

More information on the award: iuvsta.org



9:49 AM - Oct 22, 2020 - Twitter Web App

6 Retweets 3 Quote Tweets 7 Likes

IUVSTA **NEWS FLASH**



Union Internationale Pour La Science, La Technique et Les Applications du Vide International Union for Vacuum Science, Technique and Applications Internationale Union für Vakuum Forschung, Technik und Anwendung

Pierre Vinchon is the 2020 Medard W. Welch Scholarship winner

Martin Wuest, Martin.Wuest@inficon.com, IUVSTA Awards Committee Chair

The Medard W. Welch International Scholarship is awarded every year to support a young postgraduate scientist for working for up to one year in a country in which she/he has not previously studied.

The scholarship is graciously provided by Mrs. Beth Howard and Mr. Kenneth Bro, grandchildren of Medard W. Welch.

It is our pleasure to announce Dr. Pierre Vinchon as the 2020 Medard W. Welch Scholarship winner.



Pierre Vinchon began his studies at the Pierre and Marie Curie University in France where he obtained a B.Sc. in Fundamental Physics. He started his M.Sc at the same university and continued at the INRS (Institut national de la recherche scientifique) in Varennes (Quebec). His path then led to the University of Montreal where he studied graphene evolution under exposure of low-pressure inductively coupled Argon/BaHe plasma.

Thanks to this award, his next station is scheduled to be at the lab of **Prof. Satoshi Hamaguchi** at the Center for Atomic and Molecular Technologies, Graduate School of Engineering, Osaka University, where he will work on surface reactions of Plasma Enhanced Atomic Layer Etching (PEALE) and Deposition (PEALD) experimentally and theoretically.

Pierre Vinchon statement: "I am honored to have been chosen for the Medard W. Welch Scholarship and I look forward to working with Prof. Hamaguchi at Osaka University. I am excited to further explore plasma-surface interactions in this stimulating environment."



IUVSTA Welch Award 2021

- 02 Feb 2021 Email to Hendricks
- 04 Feb 2021 Email to the sponsors
- 05 Feb 2021 Confirmation that Mr. Bro and Mrs. Howard will fund again
- 22 Feb 2021 Received the half of Mrs. Beth Howard
- 04 Mar 2021 IUVSTA Newsletter Bulletin No 186
- 16 Mar 2021 Mr. Bro on travel to visit grand children born in 2020



IUVSTA Welch Award 2021

IUVSTA NEWS BULLETIN



Number: 186

Union Internationale Pour La Science, La Technique et Les Applications du Vide International Union for Vacuum Science, Technique and Applications Internationale Union für Vakuum Forschung, Technik und Anwendung

The 2021 IUVSTA International M. W. Welch Scholarship Award

Dear IUVSTA Colleagues,

Please advertise this Opportunity for Outstanding Young Scientists to Travel and Work at a Foreign Lab, the IUVSTA Welch Scholarship Award (https://iuvsta.org/welch-scholarship/). This award will provide \$15,000 for a young researcher to travel to, and work at, a lab in another country. "Young" is defined as within one year of a PhD, or up to two years after obtaining a PhD. The duration of the stay is between 3 months and 1 year. The duration depends upon the cost of living of the location chosen and level of the applicant.

A partial list of laboratories willing to host the awardee can be found here:

https://iuvsta.org/main/wp-content/uploads/2018/04/4.6-Update Possible-Welch-Scholarship-Hosting-Laboratories v2.xlsx

Note that this list is not exhaustive, and the candidate is welcome to propose any laboratory which is willing to host the stay.

A link to the application can be found here: https://iuvsta.org/welch-scholarship-application/

It will require uploading a CV, a plan of the research to be done, a letter from the hosting institution, and two reference letters. The successful candidate will be of outstanding merit and have a research plan which has a significant impact on the candidate's career. The application deadline is: June15, 2021.

We are hoping to have many applicants to choose from, so please spread the word about this opportunity far and wide. Last year we had 5 applicants and the winner was a person who studied in Canada and will spend more than three months in Japan. This is an excellent opportunity for young scientists/engineers to perform outstanding research in a foreign institution!

For questions please contact

Chair of the IUVSTA Welch Award Committee: Dr. Anton P.J. Stampfl Australian Nuclear Science and Technology Organisation Address: New Illawarra Rd, Lucas Heights NSW 2234 Postal address: Locked Bag 2001, Kirrawee DC NSW 2232 Australia

welchaward@iuvsta.org

Thank you very much! Martin Wüest Chair IUVSTA Awards and Scholarship Committee

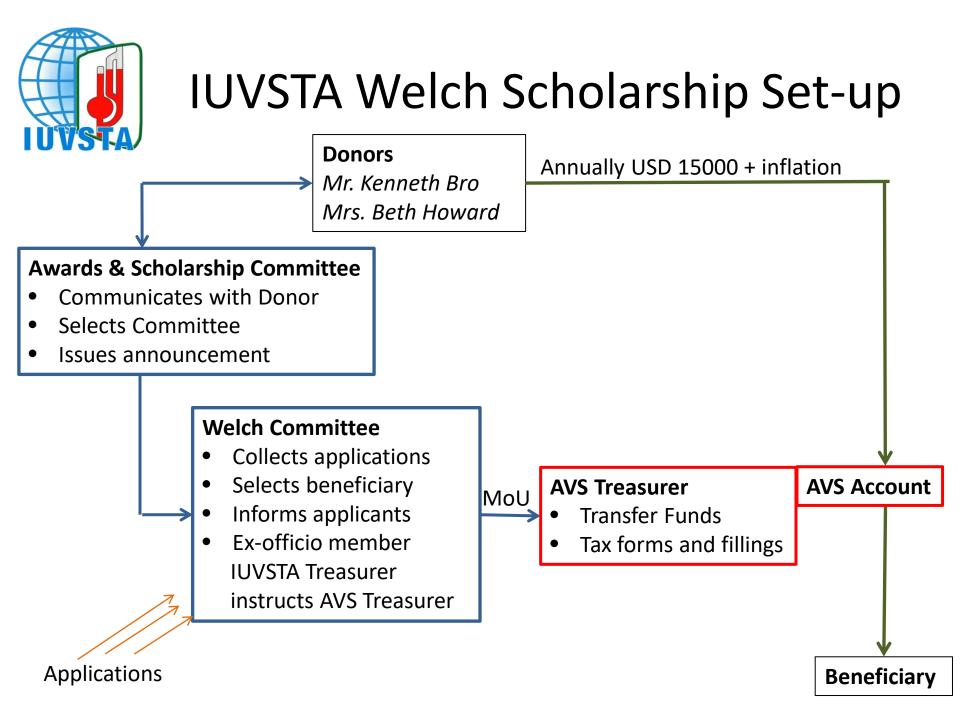
Anton Stampfl Chair IUVSTA Welch Award Committee



IUVSTA Welch Award 2021 Announcement

The award needs to be announced via email to Vacuum Societies, IUVSTA representatives, IUVSTA News Flash, LinkedIn, Twitter, Ad in Physics World Vacuum Supplement (in prep)







IUVSTA Welch Committee Members 2019-2022

Name	e-mail	Continent	Organization	Gender	Term	ECM
Anton P.J. Stampfl, Chair	aps@ansto.gov.au	Australia	Research Lab	m	2018-2021	Chair CPC
Jay Hendricks	Jay.hendricks@nist.gov	America	Gov't Lab	m	Ex-Officio (2019-2022)	Chair STD
Arnaud Delcorte	Arnaud.delcortee@uclouvain.be	Europe	University	m	Ex-Officio (2019-2022)	Treasurer
Francisco Tabarés	paco.tabares@ciemat.es	Europe	Research Lab	m	2018-2020	No function
Jennifer MacLeod	Jennifer.macleod@qut.edu.au	Asia/ Pacific	University	f	2020-2025	Alt Counillor AUS
Enrico Maccallini	Enrico Maccallini@saes-group.com	Europe	Industry	m	2018-2023	Alt Councillor Italy
Ana G. Silva	<u>acs@fct.uni.pt</u>	Europe	University	f	2018-2024	Rec Secretary & Chair ND





IUVSTA Prizes



IUVSTA Prize



Every three years IUVSTA awards two major prizes :

The IUVSTA Prize in Science

The IUVSTA Prize in Technology



IUVSTA Prize for Science

is awarded to recognize and encourage outstanding internationally-acclaimed research in the fields of interest to IUVSTA.



IUVSTA Prize for Technology

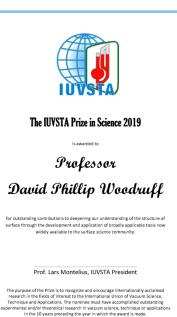
is awarded to recognize and encourage outstanding internationally-acclaimed achievements in technology and instrumentation in the fields of interest to IUVSTA.



IUVSTA Prize

consists of

- a cash award,
- a struck medal
- and a certificate







IUVSTA Prizes Nomination Package

- Nomination Letter
- Description of Research or Technological Highlights
- Biographical Materials
- Supporting Letters
 - (3-5, outside institution of nominee)
- Endorsement letter from President of National Society
- Formal Announcement after ECM-134 virtual
- Deadline January 31, 2022

IUVSTA EBARA Award



ARE YOU A YOUNG RESEARCHER WORKING IN THE AREA OF VACUUM SCIENCE AND TECHNOLOGY WITH A PASSION FOR ENVIRONMENT?

Take the chance and participate in a contest for the development of environmentally friendly vacuum technologies. The winner will be awarded a prize to the amount of 3,000 euros at the IVC21 congress in Malmö/Sweden, July 1-5, 2019.





Apply at iuvsta.org

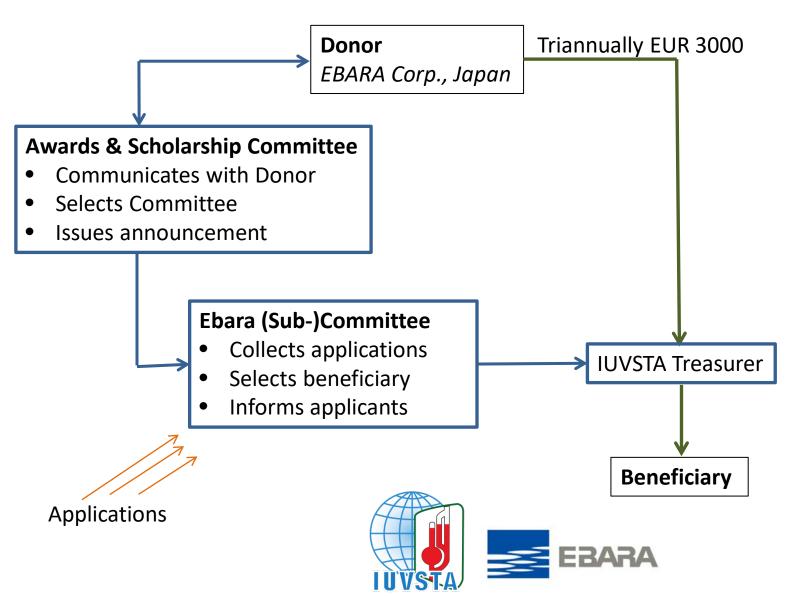
IUVSTA EBARA Young Scientist Award

- Award for a person within 10 years after Ph.D.
- For past work
- Dissemination: Web, National vac societies, IUVSTA newsflash, social media, scientific journals
- Frequency: every 3 years with IVC
- Application: Frama forms
- Evaluation: Special Committee that includes EBARA Scientist
- Award: EUR 3000 + invited talk at IVC.

– IVC conference fee to come out of IUVSTA budget



IUVSTA EBARA Award Set-up



IUVSTA EBARA Award Committee

Name	Function	Country	Sex	Division	Organization
Sylvie Bourgeois sbourg@u-bourgogne.fr	Chair	France	Female	SS	University
Shinichi Sekiguchi'関口信一' <sekiguchi.shinichi@ebara.com></sekiguchi.shinichi@ebara.com>	Award sponsor representative	Japan	Male		Industry
Julia Scherschligt julia.scherschligt@nist.gov	Member	USA	Female	VTD	Nat Inst
Pedro Nascente nascente@ufscar.br	Member	Brazil	Male	SED	University
Jörg Patscheider Joerg.patscheider@evatecnet.com	Member	Switzerland	Male	TF	Industry





Waqas Hassan Tanveer Follow-up



- First EBARA Award Winner 2019
- Now SUSTAIN Project Research Assistant, Energy Safety Research Institute (ESRI), Swansea University, UK
- Our project on Low Carbon Jet Fuels for UK aviation, won the top prize in the category of Transport at IET innovation Award last year December in London Brewery.
- Selected as Project Manger of the EPSRC grant on Creativity@Home for the projects on CCUS, where I organized workshops via facilitators to nurture creative collaboration between academia and industry
- Developed the first ever kW class SOEC system in Scotland (Biggest system in terms of power output/fuel utilization in the region)
- I was selected as Topic Editor of the MDPI Journal- Crystals where I am in process of initiating a special issue on Low Carbon Systems and Artificial Intelligence
- Reviewer of several proposals related to Low Carbon Energy/Fuel Systems for Universities in UAE, Saudi Arabia and Pakistan
- Currently working in Swansea University on a £35mil project SUSTAIN- for CO2 utilization and Carbon Capture for decarbonising the UK Steel Industry



Peter Barna Award



- The Peter Barna Award for young scientists (PhD-level) for best conference presentation consists of a certificate and a cash award of EUR 200.—
- The spirit of the award is to make a link from the well established scientists involved in ICTF to outstanding young researchers.
- This was a rather short term action, and for the time being, it is proposed, that the Secretary General notifies the Awardees (see the two attached notifications which can be sent to the Awardees).
- However, in the future, this prize should of course be associated to ASC.
- To minimize the associated work it is proposed that the selection committee is formed by the organizers of the respective ICTF, preferably involving the chair of TFD, and officers of IUVSTA if they are attending the congress. The cash award would be directly transferred to the Awardees by the treasurer.

1st Peter Barna Awardees



Šárka Batková

University of West Bohemia, Czech Republic

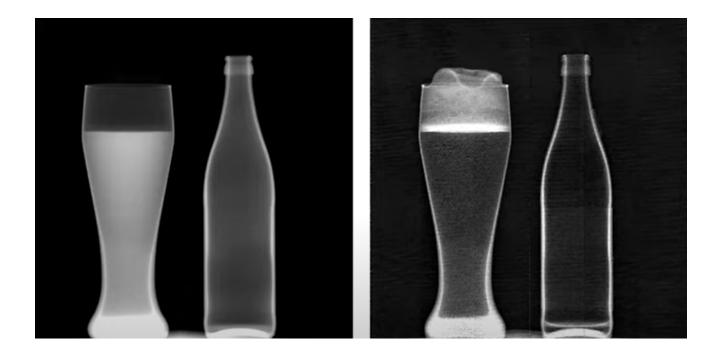
Reactive HiPIMS deposition of nitride and oxynitride films and nanostructured materials with tailored architecture



Radovan Vranik

Johannes Kepler University, Austria

Pi-Radical as potential candidate for Radio Frequency Scanning Tunneling Microscopy study



X-ray

X-ray Darkfield Contrast

Franz Pfeiffer, TU Munich

