

## 4<sup>th</sup> Conference



## Renewable Energy Sources - Research and Business (RESRB) 2019

### Venue

Wrocław, Poland

### Date

8-9 July 2019

## CALL FOR ABSTRACTS

### Invitation

The Conference Chair, International Scientific Committee and Scientific Advisory Board cordially invite you to communicate your recent research, share your expertise or strengthen your business at RESRB.

### Scope

The **Renewable Energy Sources - Research and Business (RESRB)** conference is designed as a platform for reporting, discussing, improving and disseminating recent developments in renewable energy science, technology, business and policy. Participants from various organisations such as universities, institutes, NGOs, associations, industries etc. are invited. It is an international event with ambitions to share leading research expertise and facilitate business development and thus to be one of the most influential renewable energy knowledge transfer channels. The conference is a must for research groups at the cutting edge of renewable energy science, technology, policy and business development. The conference through its unique research & business model will facilitate synergies between academia and commercial sectors. Delegates from enterprises seeking innovations and expanding to new markets may benefit from sponsoring, exhibiting and networking thus improving their business environment. RESRB is particularly focused on countries applying green growth policies and plays the role in informing policymaking processes. The participation mode can be either in-person or virtual. Digital conference Proceedings will be made available to all participants including abstracts and contact details of all accepted contributions. Submitted full manuscripts will be internally reviewed by RESRB international referees and review outcomes communicated to authors for facilitated publication in leading international journals and books.

### Themes

The **4<sup>th</sup> RESRB 2019** conference focuses on five key renewable energy areas: (1) bioenergy, (2) wind, (3) solar, (4) hydro and their (5) business development.

The special theme for the 4<sup>th</sup> RESRB 2019 is:

- Innovation Driven Renewable Energy Development

Other main themes are:

- Renewable Energy Harvesting Technologies
- Renewable Energy Economics, Business, Policy and Management
- Innovation in Renewable Energy Projects

Additional RESRB themes include:

- Solar photovoltaics
- Wind
- Hydro
- Solar thermal
- Concentrated solar power
- Geothermal energy
- Wave, tide and other marine energies
- Biofuels
- Heat pumps
- Renewable heating and cooling
- Renewables in transport
- Renewables in buildings

- Agricultural and land use issues
- Biomass production
- Agronomy
- Biorefineries
- Renewables in industrial symbiosis
- Energy systems
- Road maps
- Hydrogen and fuel cells
- Power system, power electronics, smart grid
- Technologies involving renewable energy: e.g. food drying, irrigation, desalination
- Software tools
- Environmental impact
- Life cycle assessment
- Decarbonisation and synergies with fossil fuels
- Sustainability
- Standards
- Infrastructure
- Materials
- Resources
- Power system, power electronics, smart grid
- Micro scale renewables
- Power grids, requirements, international connections
- Grid stability, power generation flexibility
- Electric vehicles
- Energy storage
- Renewables in developed, developing and underdeveloped countries
- Business models and strategies
- Planning
- Renewable energy policy
- Renewable energy economics
- Renewable energy business development
- Innovations, intellectual property rights
- Financing, project finance and management
- Accounting
- Venture capital, entrepreneurial finance, corporate finance
- Intellectual property, start-ups, licensing
- Merger and acquisitions, capital markets, outsourcing, consumer behaviour
- Incentives, legislation
- Energy markets
- Risks and risk management
- Costs and revenues
- Legislative and ethical considerations for research, business and policy interactions
- Societal issues, consumer access, social benefits
- Organisations
- Other topics of critical importance for the development of renewable energy science, technology, policy and business

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### Conference founder

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### Patrons

Renewable Energy and Sustainable Development (RES D) Group, Wrocław, Poland



### Website

<http://resrb.budzianowski.eu>

### Conference structure

The conference structure consists of keynote lectures, oral lectures, and short communications. In addition, an ISC/SAB meeting, thematic panel discussion and awards for best presenters are envisaged.

### Publications

#### *(1) Abstracts in digital Proceedings*

All abstracts of conference participants will be published on the peer-reviewed **digital Proceedings**. The maximum length of the abstract is 1 page. Proceedings will be published on-line in open-access with an ISBN number.

Peer-review procedure: (i) a minimum of two independent experts review all submissions, (ii) final abstracts must be approved by two experts and editors.

Editors of Proceedings: Budzianowski W.

## *(2) Articles in journals*

### Stage 1 - Internal Review

Full articles associated with contributions presented at the RESRB conference will be facilitated for publication in **journals**. Conference internal reviewers will advise authors on how to improve the manuscripts and suggest journals suitable for publication. Authors will make decisions regarding selection of a journal suitable for publication. Final revised articles submitted to journals by the authors will again undergo peer-review procedures consistent with journals' standards.

The internal review process will be targeted at the following journals:

- Biomass and Bioenergy (Elsevier),
- Energies (MDPI),
- Energy and Environmental Science (RSC),
- Energy Economics (Elsevier),
- Energy Policy (Elsevier),
- Energy Sources Part B Economics Planning and Policy (Taylor & Francis),
- International Journal of Green Energy (Taylor & Francis),
- International Journal of Renewable Energy Research (IJRER),
- Journal of Power Technologies (WUT),
- Journal of Renewable Energy Sources - Technology, Business and Policy (WBCS),
- Progress in Photovoltaics Research and Applications (Wiley),
- Renewable Energy (Elsevier),
- Renewable Energy Focus (Elsevier),
- Renewable and Sustainable Energy Reviews (Elsevier),
- Solar Energy (Elsevier),

but authors may suggest their own most suitable journals.

### Stage 2 - Journal Submission

After the conference authors may submit their full papers to any journal. In addition, selected full papers will be invited for journal publication in associated special issues as well as in regular issues. Special Issues affiliated with the RESRB conference has been accepted by Energies (MDPI):

- Research and Business in Renewable Energy Sources 2020

([https://www.mdpi.com/journal/energies/special\\_issues/Research\\_and\\_Business\\_in\\_Renewable\\_Energy\\_Sources\\_2020](https://www.mdpi.com/journal/energies/special_issues/Research_and_Business_in_Renewable_Energy_Sources_2020)) under construction

- Production and Utilization of Biogas

([https://www.mdpi.com/journal/energies/special\\_issues/Production\\_and\\_Utilization\\_of\\_Biogas](https://www.mdpi.com/journal/energies/special_issues/Production_and_Utilization_of_Biogas))

The best RESRB conference papers will be published in this Special Issue free of charge.

Full papers from previous RESRB conferences were published in leading journals such as Renewable Energy, Renewable and Sustainable Energy Reviews, Biofuels, Energy Conversion and Management and many others,

## *(3) Chapters in edited books*

Full articles associated with contributions presented at the RESRB conference will be facilitated for publication in **edited books**. Conference reviewers will advise authors on how to improve the manuscripts. Book Editors will invite selected manuscripts. Authors will select an edited book for publication. Peer review procedure for edited books: two independent reviewers must approve manuscripts. The conference will support the creation of edited books relevant to conference themes.

Edited Book - Selected Papers from Renewable Energy Sources - Research and Business conference

## *(4) Book*

In case a full material associated with the contribution presented at the RESRB conference can be extended to a book size (40-300 standard pages) it may be facilitated for publication as a **book** (a

monograph). Conference reviewers and the professional book editorial team at Wojciech Budzianowski Consulting Services will assist authors in meeting standards and market requirements for book publication. Authors interested to publish their extended material in a book format need to first contact [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) to discuss publication process details, costs and potential benefits for the parties. In general books can be published in a standard model or in open access model by large book publishers or by Wojciech Budzianowski Consulting Services with ISBN. Book authors usually will be offered a contract and depending on the scope of the work required for book publication and publication model it may include a remuneration for book authors. Review procedure for books: independent reviewers are involved in the entire publication process.

### **Full manuscript internal review**

Our expert reviewers provide detailed subject specific comments on manuscript quality, recommend a journal and check compliance with overall and specific publication standards. Reviewers follow Reviewer guidelines and use Manuscript review form, see Reviewers menu for details. Reviewers receive professional and financial support from the executive organiser. By contacting [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) you may also order Manuscript editorial services, see Full paper menu for details.

### **Acknowledgments**

When submitting your full conference paper to journals/edited books please acknowledge the conference presentation as follows:

The work has been presented at the 4<sup>th</sup> Renewable Energy Sources - Research and Business (RESRB) conference held on 8-9 July 2019 in Wrocław (Poland).

### **Oral lecture requirements**

Please prepare a presentation for your oral lecture in power point or similar software with additional conversion to pdf. Your oral lecture will take 15 minutes + 5 minutes discussion.

### **Short communication/virtual short communication requirements**

Please prepare your short communication/virtual short communication in a power point or pdf format. You will show your short communication to the audience during the conference short communication session (5 minutes + 3 minutes discussion). The virtual short communication of virtual participants will be presented by a Committee member or by using your video.

Short communication/virtual short communication format:

1 page short communication title page with authors,

0-2 pages CV of the corresponding author with a photograph including his/her research in renewable energy (virtual short communications only), this should clarify your expertise in the researched field,

2-5 pages main research results in the form of figures, photographs, schemes etc. (each item is clearly described by one sentence), if text is essential use very short bullet points,

1 page conclusion in short bullet points.

Please make sure that your virtual short communication is sufficiently comprehensive that it can be presented to the audience by someone who did not participate in your research and that the audience will understand the main points. Use comprehensive figures and short bullet points. Focus on your novel findings. Avoid too much text. Research goals, conclusions and originality must be particularly clear. In conclusions emphasise one key message you wish to communicate to the conference academic and/or business audiences that was formulated based on your research.

Virtual short communication in video format:

Alternatively virtual short communication may be prepared in a video format (5 minutes). The video may simply include your slides and your comments, preferably with a visible face. The preferred format is mp4 HD. The video will be displayed to the audience during the short communication session.



Send your virtual short communication at least 1 month prior the conference to:  
[wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu)

### **Business participation**

Business participants may sponsor or exhibit at RESRB and additionally:

- launch novel products and highlight existing ones,
- enhance company sales and educate the market,
- spotlight key executives,
- increase brand awareness and position the organisation in the renewable energy community,
- elevate visibility of the company in focused markets,
- benefit from interaction with a highly qualified scientific community,
- network with experts and form new alliances with national and international clients,
- have access to new knowledge and attract new innovations to the company,
- build business relationships for the future.

For participants seeking academia-business interactions the organisational structure of RESRB will provide relevant opportunities. Start-ups and other knowledge and innovation driven enterprises are particularly welcome at RESRB.

### **Sponsorship, exhibition and donation**

Various forms of sponsorship are available, in particular for companies and institutions. Sponsorship will be adequately highlighted in all conference related materials and all activities. Sponsors are also encouraged to contribute with delegates which will have the participation fee waived.

An exhibition will run alongside the conference sessions. Companies/institutions may advertise either physically at the conference or electronically exploiting dedicated solutions.

Through sponsorship and exhibition you may help us to strengthen the conference and you may efficiently reach our unique audiences with your important message.

The sponsorship and exhibition services are offered on a first-come, first-served basis. To discuss your requirements or to book sponsorship or exhibit space please contact the Executive Organiser at email: [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu); or tel.: +48 792781784.

If you appreciate what we do for the society please donate us to further improve the quality of our services.

Pay your donation to the bank account:

Bank - Alior Bank SA Łopuszańska 38 D 02-232 Warszawa

BIC (SWIFT) - ALBPPL PW

No. (IBAN) PL18249010570000990275291419 (in EUR)

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No. (IBAN) PL89249000050000410098926265 (in PLN)

Please add the statement: Donation

For other currencies and donating via credit cards consider using third party services such as Transferwise

### **Roles of conference participants**

Researcher - gives a lecture on his/her research and publishes a research abstract

Reviewer - takes part in the internal review of abstracts and full papers

Sponsor - sponsors the conferences

Exhibitor - exhibits at the conference

Participant - participates in the conference with no role specified above

While registering for the conference you will be able to indicate one or more roles.

### **Important dates**

Abstract due (extended)	March 31, 2019
Abstract acceptance decision	up to 7 days

Fee payment (extended)	April 15, 2019
Early bird fee payment	February 28, 2019
Digital conference draft Proceedings available	July 8, 2019
Conference	July 8-9, 2019
Full manuscript due	December 31, 2019
Internal review outcomes sent to authors	March 31, 2020

### Conference fees

Participation in-person (all days)	€250
Participation in-person (PhD/MSc student) (all days)	€220
Participation in-person (early bird payment by February 28, 2019) (all days)	€220
Participation in-person (1 day)	€200
Accompanying person	€220
Virtual participation (with research abstract)	€100
Additional abstract	€30
Full manuscript internal review	€70
Business participant - sponsorship or exhibition (all days)	€250

For payments in USD and PLN use the following exchange rates 1 EUR = 1.13 USD = 4.30 PLN.

### Payment instructions

Please pay the conference fee to the bank account:

Account holder - Wojciech Budzianowski Consulting Services Poleska 11/37 51-354 Wrocław

Bank - Alior Bank SA Łopuszańska 38 D 02-232 Warszawa

BIC (SWIFT) - ALBPPL PW

No. (IBAN) PL18249010570000990275291419 (payment in EUR)

No. (IBAN) PL71249010570000990175291419 (USD)

No. (IBAN) PL89249000050000410098926265 (PLN)

Payment costs - use option OUR - all transfer costs paid by the payee.

Please add the statement: Conference fee RESRB, Lastname Firstname.

For other currencies and payment via credit cards consider using third party services such as Transferwise

For payment in cash contact [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu)

### Cancelation policy

If you find it necessary to cancel your participation, exhibition or sponsorship, please email the conference organiser immediately via email: [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu). In addition, please send written notice in paper by normal post to the conference organiser address. Cancellation more than 91 days prior to the first open day of the conference - 50% of the total charge as a cancellation fee provided that written notice in paper is received by the organising committee. Cancellation 91 days or less prior to the first open day of the conference - 100% of the total charge as a cancellation fee.

### In-person participation

In-person participation is when an attendee is physically present at the conference. For in-person participants the conference fee includes the following services: (i) peer review of abstracts for Proceedings, (ii) abstract publication on the digital conference Proceedings, (iii) presentation at the conference (the first submission is oral, additional submissions are usually short communications), (iv) internal peer review of full manuscript, (v) social programme, (vi) coffee, drinks, meals etc.

### Virtual participation

Virtual participation is when an attendee is unable or unwilling to take part in-person in the conference and his/her short communication is presented to the audience during dedicated sessions.

For virtual participants a conference fee includes the following services: (i) peer review of abstracts for Proceedings, (ii) abstract publication on the digital conference Proceedings, (iii) presentation of slides at the conference by conference presenter, (iv) internal peer review of full manuscript. Virtual authors are encouraged to submit video presentations. Skype presentation and question & answers is also feasible. Virtual participation is specifically designed to facilitate the involvement of participants from developing countries for which renewable energy is important for achieving sustainable economic development and eradicate poverty.

### **Special fee reduction programme**

This conference facilitates participation of researchers from developing countries and/or temporarily without access to institutional funding under a special fee reduction programme. Download details of this programme from the section for Reviewers in the conference website.

### **Registration**

Register online at <http://resrb.budzianowski.eu> In case any registration detail change, please re-register.

### **Certificates**

Participants obtain the following certificates, letters, etc.: an acceptance letter, visa letter, certificate of presentation, certificate of award, certificate of SAB membership, invoice. These documents may be requested from [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu)

### **Participant's steps in brief**

- 1) Submit your **abstract** to [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) (use abstract template from the website)
- 2) **Register** online at <http://resrb.budzianowski.eu> (menu Registration)
- 3) Participants requiring **an acceptance letter, visa letter, certificate of presentation, invoice** or any other confirmation need to request them from [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu)
- 4) Pay your **fee** indicated during the registration
- 5) As an in-person participant you will present your **slides** at the conference according to the Programme
- 6) If you are a virtual participant please submit your **slides** or **video** to [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) (at least one month prior to the conference)
- 7) Submit your **full manuscript** to [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) and register it online at <http://resrb.budzianowski.eu> (menu Full paper)
- 8) Upon receiving internal reviewers' comments **revise** your full manuscript accordingly
- 9) Submit your **revised full manuscript** for publication to suitable journals, edited books or as a book

### **Ethical considerations**

This conference is a platform aimed at raising academic quality of science and linking the different types of participants (e.g. research, business and policy) with consideration of ethical standards to the highest possible extent. The conference seeks only original contributions. Internal review processes for abstracts and full manuscripts aim at fair evaluation of professional quality. The criteria of quality include among others: originality, conciseness, profundity, societal impact, relevance to the conference subject. Conference contributions are judged only on merits without regard to authors' race, gender, seniority, nationality, affiliation or political views. The internal review process is single blind and confidential. All ethical issues regarding any conference contribution such as plagiarism, conflict of interests, errors or violation of intellectual property rights should be immediately reported and such contributions will be excluded from the conference. Please report all important ethical issues directly to [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu).

### **Venue**

Wrocław Business Park, Wrocław, Poland

## Logistics

The Wrocław airport has connections with several major European and international airports. From the airport you may reach the city centre by taxi and buses (bus number 106, 206, and WRO AIRPORT EXPRESS). By train you need to travel to Wrocław Main Railway Station (Dworzec Główny PKP) which is in the city centre. Timetable of city buses and tramways can be accessed on-line:

<http://www.wroclaw.pl/rozklady-jazdy>

<http://airport.wroclaw.pl/en/passager/getting-here/by-bus/>

## Accommodation

Accommodation is booked by participants. Hotels which can be considered include Boutique, Park Hotel Diament Wrocław, Art Hotel Wrocław, Orbita, Dwór Polski, Hotel Mercure Wrocław Centrum, B&B Hotel Wrocław Centrum and Lothus Hotel Wrocław. There are also hostels available such as Boutique Hostel Trio, Ibis Budget Wrocław Stadion, Wratislavia, Stop, Villa A8, Platinum Centrum, Corner, Royal and Bemma. All hotels can be booked via hotel's website or services such as HRS (<http://pl.hrs.com>), Hotels.com (<http://www.hotels.com>) or Booking.com (<http://www.booking.com>).

## Programme

Monday 8 July 2019	
08.45-09.00	Registration (Hall)
09.00-09.05	Opening session (Room A)
09.05-10.30	Keynote lecture session 1 (Room A) Energy storage with high integration of renewables into the grid : challenges and opportunities <i>Patrick Hendrick*</i> *speaking author at Université Libre de Bruxelles, Brussels, Belgium Concentrated solar photovoltaics - techno-economic evaluation <i>S. Andrew*</i> *speaking author at PVC, Palo Alto, USA
10.30-11.00	Coffee break (Hall)
11.00-12.30	Oral lecture session 1 (Room A)
12.30-13.15	Lunch break (Restaurant)
13.15-14.30	Oral lecture session 2 (Room A)
14.30-14.45	Coffee break (Hall)
14.45-15.45	Short communication session 1 (Room A)
15.45-16.00	ISC and SAB Meeting (Room A)
Tuesday 9 July 2019	
08.55-09.00	Registration (Hall)
09.00-10.30	Keynote lecture session 2 (Room A) Rice straw based electricity generation from biogas in Fazilka, Punjab, India: a case study of 1.0 MW power generation system <i>R. Chandra*, V. K. Vijay, P. M. V. Subbarao</i> *speaking author at Indian Institute of Technology Delhi, New Delhi, India Opportunities and challenges of renewable energy utilization for power generation <i>Hashem Nehrir*</i> *speaking author at Montana State University, Bozeman, USA Renewable energy business opportunities in developing countries <i>W. Budzianowski*, W. Surmanek</i> *speaking author at Wojciech Budzianowski Consulting Services, Wrocław, Poland
10.30-11.00	Coffee break (Hall)

11.00-12.30	Oral lecture session 3 (Room A) A new form of decentralized energy: lessons from the WiseGRID project <i>Rafael Leal-Arcas*</i>
12.30-13.15	Lunch break (Restaurant)
13.15-13.45	Oral lecture session 4 (Room A)
13.45-14.00	Coffee break (Hall)
14.00-15.00	Short communication session 2 (Room A)
15.00-15.45	Panel discussion (Room A)
15.45-16.00	Closing session (Room A) - Award ceremony (1) Best conference lecture (2) Best conference lecture by student

### Conference language

English

### Future editions of RESRB conferences

Please contact conference founder at [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) if you are interested to co-chair the 5<sup>th</sup> RESRB 2020 conference or the 6<sup>th</sup> RESRB 2021 conference in your country.

### Contact details

The organising committee may be contacted by email: [wojciech1@budzianowski.eu](mailto:wojciech1@budzianowski.eu) or by phone +48 792781784.