



Newsletter No. 63

The 7th School on PEF Applications in Food and Biotechnology

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Following the success of the previous schools held in Zaragoza (Spain), Salerno (Italy), Dublin (Ireland), Vienna (Austria), Osnabrück (Germany), and Cesena (Italy), the 7th School on PEF applications in food and biotechnology that was postponed in 2020 was held from May 31st to June 2nd, 2021 at the University of Zaragoza (Spain). Because of the uncertainty brought about by living in these troubled times, the Scientific Committee of the School decided to organize this event online for the first time. The School was attended by 15 lecturers, 55 students, and 6 industrial delegates from 18 countries.

The School aimed to offer attendants (PhD students, early-stage researchers, and industrial users of the technology) an overview of knowledge and understanding of the basic principles involved in processing by pulsed electric fields, and to provide practice in the use of these principles in the food and biotechnological industries.

The programme of the School included similar activities as in previous editions: lectures, practical sessions, and short presentations of the research conducted by students and of the companies supporting the event. The lectures presented by world-leading experts in the field were focused on fundamentals of electroporation and generation of pulsed electric fields, and on the effects of interest and applications of PEF in the food and biotechnology industry. During the practical sessions on the two first days, students learned the handling of computer programmes for defining processing conditions and modelling PEF processing using numerical simulation tools. The practical activity of the last day was a live demonstration on the effects of PEF. This activity was supported by a chef who prepared several dishes with PEF-treated products.

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The School was closed with a social activity. Before starting this activity we were honoured by the presence of Lluís Mir, the current President of the ISEBTT, which introduced the Society to the attendants. The social event started with a virtual tour of our beautiful region of Aragon and our amazing city of Zaragoza. After that, and as in the online event attendants had not the opportunity to taste the food and tapas of our city, we tried to bring to their home a little taste of our land. All attendants received a parcel with documentation and a couple of bottles of olive oil and wine, and they thus had the opportunity of tasting guided by expert tasters.

The organization of the PEF School online for the first time was a big challenge for both the Scientific and the Organizing Committee. We hope to have kept the high standards and quality of the previous editions. The success of the School has been possible thanks to the professionalism of the Scientific Committee and of lecturers, due to the support of the Organizing Committee and our sponsors, but above all, thanks to the enthusiasm and active participation of attendants.

It would be unfair not to end this report with a few words of remembrance for Justin Tessie. Justin was a member of the School's Scientific Committee and a regular School lecturer. He was always aware of the necessity of transmitting to the students the importance of fundamental knowledge and understanding of the electroporation phenomenon to developing practical applications. We definitely missed Justin's lecture but, above all, his comments, questions, and discussions.

The next edition of the PEF School that has been scheduled for May 2022 will be organized for the first time in France by Eugène Vorobiev, Nabil Grimi, and Nadia Boussetta at the Université de Technologie de Compiègne.

More information about the PEF School 2021 can be found on the website:

pefschool2021.electroporation.net.

Forthcoming events

2021 while-we-wait webinar (in time of the postponed World Congress) and ISEBTT General Assembly

online event, September 21 – 22, 2021

<https://wc2022.electroporation.net>

15th interdisciplinary postgraduate course and international workshop Electroporation Based Technologies and Treatments (EBTT)

Ljubljana, November 14 – 20, 2021

<http://www.ebtt.org>

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*PEF School organizers and
attendants during the social
event*

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