

Interdivisional Teaching Commission

<https://www.idtc-iuhps.com>

President: Raffaele Pisano, Lille University, France

Secretary/Treasurer: Gianna Katsiampoura, National & Kapodistrian University of Athens, Greece

Communications Officer: Paulo Mauricio, Polytechnic Lisbon Institute, Portugal

REPORT OF ACTIVITIES 2019-2020

Membership number of the Commission/Section

45

<https://www.idtc-iuhps.com/memberslist.html>

[a Member applies through an e-form (<https://www.idtc-iuhps.com/become-a-member.html>) in our website and the IDTC Officers proceed with approval.

Summer Schools

<https://www.idtc-iuhps.com/activities.html>

Plans for organizing the annual IDTC Summer School in Lille have been cancelled due to the corona virus pandemic. The Organizing Committee did not make plans for holding the event on-line. For 2021, the Organizing Committee is planning for an alternative on-line event.

Publications

<https://www.idtc-iuhps.com/activities.html>

Pisano, R., Mauricio, P. & Vincent, P. (2020) Introduction to IDTC Special Issue: Joule's Bicentenary History of Science, Foundations and Nature of Science. *Found Sci* (2020). <https://doi.org/10.1007/s10699-020-09680-2>

FOREWORD to IDTC Special Issue

Science Education: Principles

Joseph Agassi in Foundations of Science (2020)

2020. Introduction to IDTC Special Issue. Joule's Bicentenary: History of Science, Foundations and Nature of Science.

Raffaele Pisano, Paulo Mauricio and Philippe Vincent in Foundations of Science (2020)

Joule's Experiments on the Heat Evolved by Metallic Conductors of Electricity

R. A. Martins in Foundations of Science (2020)

Introducing Joule's Paddle Wheel Experiment in the Teaching of Energy: Why and How? Manuel Bächtold in Foundations of Science (2020)

Science Outside Academies: An Italian Case of “Scientific Mediation”—From Joule’s Seminal Experience to Lucio Lombardo Radice’s Contemporary Attempt
Fabio Lusito in *Foundations of Science* (2020)

Joule’s Nineteenth Century Energy Conservation Meta-law and the Twentieth Century Physics (Quantum Mechanics and Relativity): Twenty-First Century Analysis
Vladik Kreinovich, Olga Kosheleva in *Foundations of Science* (2020)

Joule’s Experiment as an Event Triggering a Formalization of a Baconian Science Till Up to an Alternative Theory to Newton’s One
Antonino Drago in *Foundations of Science* (2020)

Historical Foundations of Physics & Applied Technology as Dynamic Frameworks in Pre-Service STEM.
Raffaele Pisano, Philippe Vincent, Kosta Dolenc and Mateja Plojvirtic in *Foundations of Science* (2020)

On the Energy Concept Problem: Experiments and Interpretations
R. Lopes Coelho in *Foundations of Science* (2020)

Conservation of Energy: Missing Features in Its Nature and Justification and Why They Matter
J. Brian Pitts in *Foundations of Science* (2020)