

Elina Charatsidou MSc

Physicist & Nuclear Engineer

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Education

Ph.D. in Physics and Nuclear Engineering, KTH Royal Institute of Technology, Sweden	2021 - Present
MSc in Nuclear Energy Engineering, KTH Royal Institute of Technology, Sweden	2018 - 2020
BSc in Physics, AUTH Aristotle University of Thessaloniki, Greece	2013 - 2017

Experience

Coordinator of the Female Faculty Network, KTH, Sweden	Feb. 2024 - Present
MSc Thesis Supervisor, KTH, Sweden	Dec. 2022 - Present
Teacher, KTH, Sweden	Oct. 2022 - Present
Science Communicator, YouTube, Elina Charatsidou - Your Friendly Nuclear Physicist	June 2022 - Present
Workgroups Manager at the Ph.D. Chapter Board of Directors, KTH, Sweden	July 2022 - July 2023
Ph.D. Student Representative for the Physics Department, KTH, Sweden	Jan. 2022 - Jan. 2023
Newsletter Editor at the School of Science, KTH, Sweden	May 2020 - Jan. 2023
MSc Thesis at Westinghouse Electric Company, Västerås, Sweden	Jan. 2020 - June 2020
Student Ambassador for the Nuclear Energy Engineering MSc, KTH, Sweden	Sept. 2018 - June 2020
Mentor for students with disabilities, KTH, Sweden	Sept. 2018 - June 2020

Invited Speaker

American Nuclear Societies 2024 meeting, Florida, USA	17 - 21 Nov. 2024
NuMat: The Nuclear Materials Conference, Singapore	14 - 17 Oct. 2024
Science Today – Event on Energy, Nobel Prize Museum, Sweden	23 Feb. 2024
JRC Hackathon in Innovative Communication Tools, Karlsruhe, Germany	1 Feb. 2024
French - Swedish Research Day on Future Nuclear Energy, KTH, Sweden	9 - 10 Oct. 2023
KTH Alumni Lecture on the Modern Nuclear Technology, KTH, Sweden	1 Sept. 2023
Girls in STEM Day 2023, KTH, Sweden	18 May 2023
Lecture in CO ₂ Neutral Energy and Transport System, MSc course, KTH, Sweden	15 May 2023
Presentation on Nuclear Education at KTH in Sweden, AUTH, Thessaloniki, Greece	19 Dec. 2022
28 th Hellenic Nuclear Physics Society Symposium, AUTH, Thessaloniki, Greece	31 May - 1 June 2019
Presentation on Nuclear Education at KTH in Sweden, AUTH, Thessaloniki, Greece	25 Oct. 2022

Events Organization

CET 2024 Conference, Oskarshamn, Sweden	18 - 20 Sept. 2024
ACerS Conference on nuclear energy & materials, Uppsala, Sweden	Aug. 2023
Field visits for KTH master students, STUDESVIK, Åspo Lab, Sweden	21 - 29 Nov. 2023
Sports Events for PhD students, KTH, Sweden	28 Apr. 2023
CET 2022 Conference, Oskarshamn, Sweden	21 - 23 Sept. 2022
SUNRISE project technical workshop, KTH, Sweden	14 - 15 June 2022
Gender Equality seminar for PhD students, KTH, Sweden	16 June 2022

Training

ESNMS European School on Nuclear Materials Science, IESC, Corsica, France	7 - 11 Nov. 2022
MeV Summer School ORNL, Tennessee, USA	18 - 29 July 2022
FJOH Summer School on Nuclear Reactors, Physics, Fuels, and Systems, Karlsruhe, Germany	21 - 21 Aug. 2019
Geological Storage of Spent Nuclear Fuel, Summer School, Oskarshamn, Sweden	8 - 20 June 2019
ISIS Reactor Training Course, CEA/INSTN Saclay, Paris, France	4 - 7 Dec. 2018

Conference Participation

Applied Nuclear Physics Conference, Thessaloniki, Greece	22 - 27 Sept. 2024
TMS 2024 Conference, Orlando, Florida, USA	3 - 7 Mar. 2024
NuFuel 2023, Marseille, France	7 - 9 Nov. 2023
31 st Hellenic Nuclear Physics Society Symposium, NTUA, Athens, Greece	29 - 30 Sept. 2023
ICONE30 2023 30 th International Conference on Nuclear Engineering, Kyoto, Japan	22 - 26 May 2023
TMS 2022 Conference, Anaheim, California, USA	27 Feb. 2022 - 3 Mar. 2022

Publications

- [1] Y. Mishchenko, S. Patnaik, E. Charatsidou, J. Wallenius, D.A. Lopes, Potential accident tolerant fuel candidate: Investigation of physical properties of the ternary phase U₂CrN₃, J. Nucl. Mater. 568 (2022) 153851. <https://doi.org/10.1016/j.jnucmat.2022.153851>.
- [2] E. Charatsidou, M. Giamouridou, A. Fazi, G. Nagy, D.R. Costa, S.N. Katea, M. Jolkkonen, G. Westin, M. Thuvander, D. Primetzhofer, P. Olsson, Proton irradiation-induced cracking and microstructural defects in UN and (U,Zr)N composite fuels, J. Materiomics (2024). <https://doi.org/10.1016/j.jmat.2024.01.014>.

Outreach

Member of the Women in Nuclear Global Young Generation	Jan. 2024 - Present
Official Nominator at the VinFuture Prize	Dec. 2023 - Present
Event on Future of Nuclear Power, Technology Museum, Stockholm, Sweden	Oct. 2023
Incorporating KTH in Gender Equality Network in the European Research Area Project	Dec. 2022 - Present
Nuclear Fuel Lab visits for students and external participants, KTH, Sweden	Oct. 2022 - Present
GeDiMIRT Gender Dimension in STEM Conference, Lund, Sweden	21 - 23 June 2022
Member of the WoP (Women PhDs), KTH, Sweden	June 2022 - Present
Scientific YouTube channel on public awareness of nuclear power	June 2022 - Present

Languages

Greek, Native | Russian, Native | English, Fluent | Swedish, Intermediate | Ukrainian, Elementary | French, Elementary | German, Elementary

Skills

Experimental: Microscopy (LOM, SEM, EBSD, AFM) | Elemental Analysis (EDS, LECO) | Spark Plasma Sintering (SPS) | XRD | Irradiation & Implantation | Nano Indentation | Laser Flash Analysis (LFA) | TEM | APT | TGS

Computational: Python | MS Office | Machine Learning | DFT | ATAT SQS | MCNP | Matlab/Simulink | Serpent | Apros | Mathematica

Certificates

CPR Certificate in first aid for infants, children, and adults	17 May 2022
Driving License, Category B	2017 - 2032

