

PERSONAL INFORMATION

Rossana Dell'Anna



 dellanna@fbk.eu

WORK EXPERIENCE

from 01.03.2024 to today

Head of the Spectroscopy Group

Fondazione Bruno Kessler (FBK), Sensors and Devices Center, Materials & Topology for Sensors & Devices Unit (MTSD), Via Sommarive 18, 38123, Povo, TN, Italy, www.fbk.eu.

- She coordinates the research activities of the spectroscopy laboratories for material engineering, device development, and testing in the SD Center. Research studies, papers and project writing, people training and coordination.

Type of business or sector:

Spectroscopy for quantum technology and nanotechnology; people, laboratories, and project management.

from 01.01.2020 to today

Principal Investigator of the Raman and SPM laboratory

FBK, Sensors and Devices Center, MTSD.

- Raman spectroscopy and SPM (Scanning Probe Microscopy) analyses that she applies to quantum- and nano-technology and material characterisation in general. Research studies, industrial services, papers and projects writing, people training and coordination.

Type of business or sector:

Spectroscopy for quantum technology and nanotechnology; people, laboratory, and project management.

from 01.01.2021 to 29.02.2024

Head of the Materials Characterization Group

FBK, Sensors and Devices Center, MNF.

- She coordinated the research activities of the surface science and materials characterisation laboratories of MNF (micro and nano-fabrication & micro and nano-characterization facility). She coordinated a team of 6 researchers working with different physical-chemical analytical techniques (SIMS, XPS, FIB-SEM, EDX, EBSD, SPM, Raman).

Type of business or sector:

Surface and materials science in micro- and nanotechnology; people and project management.

from 01.01.2004 to 31.12.2005

Head of the Bioinformatics Group

Automated Reasoning System Division at former ITC-IRST, now FBK

- She coordinated the research activities of a team of 4 researchers in the field of machine learning and multivariate statistical analysis on high-throughput biomedical data.

Type of business or sector:

Bioinformatics. People and project management.

from 01.12.2001 to 31.12.2003

Research Scientist

Bioinformatics Group of the Automated Reasoning System Division at former ITC-IRST, now FBK

- Image analysis and processing; Tissue Microarrays methodology; research studies, papers writing.

Type of business or sector:

Bioinformatics.

from 01.02.1999 to 01.04.2000

Industrial European Researcher

Engin Soft Trading s.r.l., Trento, Italy

- Algorithm development and application for the optimisation of kinematic and dynamic properties of industrial machinery.

Type of business or sector:

Numerical analysis for Engineering.

EDUCATION AND TRAINING

from 1995 to 1998

Ph.D. Degree in Physics

EQF level 8

University of L'Aquila, Italy.

Ph.D. Thesis: "Study of the dynamic and structural properties of strong and fragile glasses by numerical simulation".

from 1985 to 1994

Advanced numerical simulation. Collective dynamic properties of disordered systems.

Master Degree in Physics, Graduated Summa cum Laude

EQF level 7

University of Trento, Italy.

Thesis: "Il metodo dei momenti per il calcolo della dinamica di sistemi disordinati".

Specialization in advanced numerical simulation applied to condensed matter physics. Simulation of light-matter interaction.

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

Self-assessment, European Level:

	Understanding	Speaking	Writing
English	C2	C1	C1
German	C1	B2	B2

Project-related expertise

- Color centers in diamond and in other wide-bandgap materials for quantum technologies;
- light-matter and ion-matter interaction;
- Machine learning and data mining applied to biomaterial science;
- programming, statistical computing and graphics with R, C and Fortran
- supervision of PhD and master's thesis.

Professional associations

- Reviewer Board Member of Nanomaterials (ISSN 2079-4991, IF 5.076);
- Member of the FBK working team for setting up the Gender Equality Plan (GeP), approved by the FBK Executive Board in January 2022;
- Since 2021, a member of the FBK working team for assessing the certification process for gender equity.

Skills

- highly expert in managing the interdisciplinary nature of the different research topics and projects she faced, always backed by strong theoretical knowledge;
- science dissemination for students and citizens.

ADDITIONAL INFORMATION

Recent Projects

Scientific coordinator for FBK of Spoke 4 in the (2022-2025) NQSTI (National Quantum Science and Technology Institute) project of the Piano Nazionale di Ripresa e Resilienza (PNRR), Partenariato esteso 04: Scienze e Tecnologie Quantistiche (PE 0023). Spoke 4 focuses on photon-based quantum technologies;

Team member of the (2022-2023) project "GeV color centers by Ion implantation for Quantum applications (GeVIon-Q); funded by Q@TN, Quantum Science and Technology Center in Trento (<https://quantumtrento.eu/>). Contribution: Raman and photoluminescence measurements;

Team member of the (2019-2022) project Q-Diadema, funded by Q@TN, Quantum Science and Technology Center in Trento (<https://quantumtrento.eu/>). Topic: color centers in diamond for single-molecule sensing. Contribution: Raman and PL measurements;

Author and PI of 4 peer-reviewed projects (2014-2019) for granted beamtime at the Ion Beam Center of the HZDR Helmholtz Zentrum in Dresden. Topic: ion beam irradiation for surface nanostructuring and defects formation.

Research products

Author of 35+ international refereed publications and two book chapters.



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Trento, April 28, 2025