

## CURRICULUM VITAE

ANGELA DE BONIS

### EDUCATION

-1997: Master Degree in Chemistry 110/110 cum Laude - Università della Basilicata

-2001: Ph.D. in Chemical Science at the Università degli Studi di Catania with

### CURRENT POSITION

-2015 - now: Associate professor of Physical Chemistry (SSD-Chim02) Dipartimento di Scienze - Università della Basilicata.

-2020 – now: Member of the PhD Board of the International Doctoral School in Science – Dipartimento di Scienze – Università della Basilicata

-Italian National Qualification as full Professor of Physical Chemistry (03/A2: SSD-Chim02) from 2017 in the ASN 2016.

### TEACHING ACTIVITIES

Academic teaching at the Università della Basilicata

-2004 - 2011: “Physical Chemistry Laboratory II” - Bachelor degree in Chemistry

-2011: “Physical Chemistry I” - Bachelor degree in Chemistry

-2012 – now: “Fundamentals of Spectroscopy” - Bachelor degree in Chemistry

-2016 – now: “Physical Chemistry Laboratory I” - Bachelor degree in Chemistry

Since 2008, I was involved as supervisor in the formation activity of more than 30 undergraduate and Ph.D. students in Chemistry

### RESEARCH INTEREST

The research interest was focused in the field of the laser assisted synthesis with the final aim to develop knowledge-based functional nanostructured materials for advanced technological applications. The main activities are:

-Pulsed Laser Deposition of thin films of materials of technological interest including carbides, nitrides, oxides, metal alloys, glasses and quasicrystals. The characteristics and dynamics of the laser ablated plasma were studied by Optical Emission Spectroscopy, Mass Spectrometry and Fast ICCD Imaging. The mechanisms of films deposition and growth were studied by spectroscopic and microscopic techniques.

-Laser Ablation in Liquid (LAL) of graphite, fullerite and metals, for the production of nanodiamonds, metal metal oxide and metal carbide nanoparticles with optical and catalytic properties.

-Physical-chemistry experimental characterization of the materials structural, thermodynamic and morphological properties (X-ray diffraction, scanning electron microscopy, transmission electron microscopy, atomic force microscopy, Raman spectroscopy, infrared spectroscopy, optical spectroscopy, X-ray photoemission spectroscopy,)

-Single and Double Pulse Laser Induced Breakdown Spectroscopy (LIBS) study of materials of interest in the field of Cultural Heritage.

#### MAIN BIBLIOGRAPHIC DATA

The research activity produced 88 papers.

In the last 10 years I was corresponding author of 16 papers and first author of 24 papers.

#### INSTITUTIONAL RESPONSIBILITIES

-2016 - now: Member of the Board of Directors of “Consorzio Interuniversitario Nazionale per la Scienza e Tecnologia dei Materiali” (INSTM).

-2016-2020: Coordinator of the B. and M. Sc. Degree in Chemistry at the Università della Basilicata

-2019- now: Councilor of the Società Chimica Italiana - Sezione Basilicata

-2020- now: Member of the Research Board at Dipartimento di Scienze – Università della Basilicata

-I'm actively involved in the public engagement activities of Università della Basilicata (Open Days, European Researchers' Nights, Piano Lauree Scientifiche - PLS).

#### COMMISSIONS OF TRUST

-2016 - now: Member of the International Advisory Board of the International Biennial Conference “Biomaterials and novel technologies for Healthcare” - BIOMAH

-2015 – now: Member of the Editorial Board of the journal “Advances in Materials Science and Engineering” (Hindawi)

-2019 – now: Member of the Editorial Board of the journal “Coatings” (MDPI)

#### REVIEWER:

Reviewer of over 100 papers for Elsevier, Springer, Wiley, AIP, IOP, MDPI Physical Chemistry and Material Chemistry journals.