

CURRICULUM VITAE

JEFTIĆ Jelena

5 septembre 1966

Nationality: **French and Croate**

Place of birth: **Zagreb, Croatia**

Civility : **single**

Personal address : **16 A, Boulevard Alexis Carrel, 35700 Rennes, France.**

Professional address : **ENSCR UMR CNRS 6226, Laboratory "Sciences Chimiques de Rennes", Equipe : "Chimie *Organique et Interfaces*",
11, allée de Beaulieu, CS 50837, 35708 Rennes cedex 7, France.**

Tél. : **02 23 23 80 34**

Fax : **02 23 23 81 99**

e-mail : jelena.jeftic@ensc-rennes.fr

FORMATION ET ACTIVITES PROFESSIONNELLES

- Sept. 2000** **Professor** at *Ecole Nationale Supérieure de Chimie de Rennes*, France, (speciality *Physical, Theoretical and Analytical Chemistry and Solid State Physics and Materials*, UMR CNRS 6226 Laboratory "*Sciences Chimiques de Rennes*", Team "*Chimie **Organique et Interfaces***". Collaboration with Professor Thierry Benvegnu in the field of organic and physical chemistry of lipids and surfactants.
- 1999 - 2000** **Scientific Assistant** at the University of Geneva, Switzerland, in the group of Professor Andreas Hauser concerning the project TMR-TOSS (**T**ransport and **M**obility of **R**esearchers: *Thermal and Optical Spin Switching*).
- 1999** **Habilitation to Direct Research** at the University of Rennes 1, France ; Jury members : Professors Marcel Bertault, François Varret, Claude Ecolivet, Andreas Hauser, Jean-Pierre Tuchagues, Silvio Decurtins, Leo Klasinc and Jacky Evan.
- 1998 - 1999** **Assistant in teaching and research (ATER)** at the University of Rennes 1, France, in the Group of Condensed Matter and Materials UMR CNRS 6626 under the direction of Professor Hervé Cailleau.
- 1997 – 1998** **Post-doctoral research** at the University of Versailles, France, Laboratory of Magnetism and Optics UMR CNRS 8634 under the direction of Professor François Varret.
- 1997** **PhD Thesis**, University of Berne, Switzerland, entitled « *The Influence of Pressure on the Thermal Equilibrium and the Relaxation Dynamics in the*

Iron(II) Spin-Crossover System $[Fe_xZn_{1-x}(ptz)_6](BF_4)_2$. Jury composition: Professors Andreas Hauser and Gion Calzaferri, *note : very good*

- 1993 - 1997** **Assistant of Chemistry** at the University of Berne, Switzerland, Department of Chemistry and Biochemistry.
- 1991 – 1992** **Training course** at the University of Basel, Switzerland, under the direction of Professor John Maier.
- 1985 – 1991** **B. Sc. and M. Sc. in Chemistry**, University of Zagreb, Croatia directed by Professors Tomislav Cvitaš and Leo Klasinc and the Center of Nuclear Research in Jülich, Germany, under the direction of Professor Dieter Kley.

LANGUAGES

Mother tongue: **Croatian**

Other languages: **French, English, German** (fluently), **Suisse German** (basic knowledge)

BOURSES

Fonds National Suisse pour la Recherche : bourse post-doctorale en 1998

Rennes Métropole : Allocation d'Installation Scientifique en 2004

SELECTED PUBLICATIONS

Jelena Jeftić, Mathieu Berchel, Cristelle Mériadec, Loïc Lemiègre, Franck Artzner, Thierry Benvegnu « [Spectroscopic determination of Deborah numbers in membrane-mimetic bolaamphiphile assemblies](#) » *Spectroscopic Letters* **2025**, 58(1), 78 - 94.

Eric Collet, Giovanni Azzolina, **Jelena Jeftić** and Marie-Hélène Lemée-Cailleau
« [Coupled Spin-Crossover and Ferroelasticity: Revisiting the Prototype \$\[Fe\(ptz\)_6\]\(BF_4\)_2\$ Material](#) »
Advances in Physics: X, **2023**, 8, 1 - 20.

Damien Milliasseau, **Jelena Jeftić**, Freddy Pessel, Daniel Plusquellec and Thierry Benvegnu
« [Thermal Stability Experiments on Surfactants Issued from Pectin for Use as Binders in Bitumen](#) »
Trends in Physical Chemistry, **2021**, 21, 19 - 27.

Yohann Martinetto, Bruce Pégot, Catherine Roch-Marchal, Mohamed Haouas, Betty Cottyn-Boitte, Franck Camerel, **Jelena Jeftić**, Denis Morineau, Emmanuel Magnier and Sébastien Floquet
« [A Decatungstate-Based Ionic Liquid Exhibiting a Very Low Dielectric Constant Suitable for Acting as a Solvent and a Catalyst for the Oxidation of Organic Substrates](#) »

New Journal of Chemistry, **2021**, 45, 9751 - 9755.

Damien Milliasseau, **Jelena Jeftić**, Freddy Pessel, Daniel Plusquellec and Thierry Benvegny

« Transformation of Pectins into Non-Ionic or Anionic Surfactants Using a One-Pot and Cascade Mode Process »

Molecules, **2021**, 26, 1956 - 1978.

Yohan Martinetto, Salomé Basset, Bruce Pégot, Catherine Roch-Marchal, Franck Camerel, **Jelena Jeftić**, Betty Cottyn-Boitte, Emmanuel Magnier and Sébastien Floquet
« Synthesis, Physical Properties and Applications of a Series of New Polymetalate-Based Ionic Liquids »

Molecules, **2021**, 26, 496 - 514.

Jelena Jeftić, Matthieu Berchel, Cristelle Mériadec, Loic Lemiegre, Franck Artzner and Thierry Benvegny

« Membrane Mimetic Bolaamphiphiles and the Role of the Nature of Lipid Chains »

European Biophysics Journal, **2021**, 50, S170 - S170.

Teresa Feldman, Simon Nicolas, **Jelena Jeftić**

« Comparing rheological properties of glycerol paraffin formulations »

Trends in Physical Chemistry, **2020**, 19, 1 – 8.

Nouha Sari-Chmaysem, Samir Taha, Hiba Mawlawi, Jean-Paul Guégan, **Jelena Jeftić**, Thierry Benvegny

« Extracted ulvans from green algae *Ulva linza* of Lebanese origin and amphiphilic derivatives: evaluation of their physico-chemical and rheological properties »

Journal of Applied Phycology, **2019**, 31, 1931 – 1946.

Jelena Jeftić and Thierry Benvegny, Chapter 7 « Lipid bolaamphiphiles for fabricating membrane-mimetic biomaterials » in “Self-Assembling biomaterials” Edited by Helena Azevedo and Ricardo da Silva, Woodhead publishing, **2018**.

Maxime Demazeau, Nicolas Quesnot, Nicolas Ripoché, Claudine Rauch, **Jelena Jeftić**, Fabrice Morel, Fabienne Gauffre, Thierry Benvegny, Pascal Loyer

« Efficient transfection of Xenobiotic Responsive Element-biosensor plasmid using diether lipid and phosphatidylcholine liposomes in differentiated HepaRG cells »

International Journal of Pharmaceutics, **2017**, 524, 268 – 278.

Damien Milliasseau, Thierry Benvegny, **Jelena Jeftić**, Daniel Plusquellec

« Process for obtaining D-galacturonic acid derivatives from pectins via acid-catalyzed hydrolysis »

Patent, PCT Int. Appl. (**2016**) WO 2016146941 A1 20160922.

Rudy Covis, Jean-Paul Guégan, **Jelena Jeftić**, Mirjam Czjzek, Maud Benoit, Thierry Benvegny

« Structural and rheological properties of kappa (κ)-carrageenans covalently modified with cationic moieties »

Journal of Polymer Research, **2016**, 23:78, 1 - 11.

Nouha Sari-Chymaysem, Samir Taha, Hiba Mawlawi, Jean - Paul Guégan, **Jelena Jeftić**, Thierry Benvegna « [Extracted and depolymerized alginates from brown algae Sargassum vulgare of Lebanese origin: chemical, rheological and antioxidant properties](#) »

Journal of Applied Phycology, **2015**, 27, 1 - 15.

Tony Le Gall, Julie Barbeau, Sylvain Barrier, Mathieu Berchel, Loïc Lemiègre, **Jelena Jeftić**, Cristelle Mériadec, Franck Artzner, Deborah R. Gill, Stephen C. Hyde, Claude Ferec, Pierre Lehn, Paul-Alain Jaffres, Thierry Benvegna, Tristan Montier « [Effects of a Novel Archaeal Tetraether-Based Colipid on the In Vivo Gene Transfer Activity of Two Cationic Amphiphiles](#) »

Molecular Pharmaceutics, **2014**, 11, 2973-2988.

Jelena Jeftić

« [Spin Transition, Cooperative Effects under External Pressure and the High-Spin → Low-Spin Relaxation](#) »

Advances in Chemical Science **2014**, 3, 1-6.

Thierry Benvegna, Loïc Lemiègre, Sylvain Dalençon, **Jelena Jeftić**

« [Applications of Extremophilic Archaeal Lipids in the Field of Nanocarriers for Oral/Topical Drug Delivery](#) »

Current Biotechnology, **2013**, 2, 294-303.

Jelena Jeftić, Mathieu Berchel, Cristelle Mériadec Thierry Benvegna

« [Small-Angle and Wide-Angle X-Ray Scattering Study of Slow Relaxation Following Phase Transitions of New Bolaamphiphiles Based on N-\(12-Betainylamino-Dodecane\)-octyl β-D-Glucosyluronamide Chloride](#) »

Spectroscopy Letters **2012**, 45, 392-403.

Jelena Jeftić

« [Spin transition under pressure](#) »

International Journal of Chemical Modeling, **2012**, 4, 67–75.

Jelena Jeftić, Mathieu Berchel, Cristelle Mériadec, Thierry Benvegna

« [Slow relaxation following the thermal hysteresis of new bolaamphiphiles studied by SAXS/WAXS](#) »

European Biophysics Journal, **2011**, 40, S79.

Jelena Jeftić, Mathieu Berchel, Loïc Lemiègre, Cristelle Mériadec, Franck Artzner, Thierry Benvegna

« [Structural studies of supramolecular assemblies based on new dissymmetrical bolaamphiphiles](#) »

European Biophysical Journal **2009**, 38, S188.

Mathieu Berchel, Cristelle Mériadec, Loïc Lemiègre, Franck Artzner, **Jelena Jeftić**, Thierry Benvegna

« [Supramolecular Structures Based on New Bolaamphiphile Molecules Investigated by Small Angle and Wide Angle X-ray Scattering and Polarized Optical Microscopy](#) »

Journal of Physical Chemistry B **2009**, 113, 15433-15444.

Jelena Jeftić

« Thermal and pressure-induced spin transition coupled to crystallographic phase transition in some Fe(II) molecular crystals »

High Pressure Research, **2009**, 29, 369-376.

Mathieu Berchel, Loïc Lemiègre, Sylvain Trépout, Olivier Lambert, **Jelena Jeftić**, Thierry Benvegnu

« Synthesis of unsymmetrical saturated or unsaturated cationic bolaamphiphiles »

Tetrahedron Letters, **2008**, 49, 7419-7422.

Mathieu Berchel, Loïc Lemiègre, **Jelena Jeftić**, Thierry Benvegnu

« Synthesis of unsymmetrical spin-labelled bolaamphiphiles »

Tetrahedron Letters, **2008**, 49, 4690-4692.