

# Former member of Empa group Ceramic-based Composites

(Dec. 31, 2017, in alphabetical order)

Name, surname	Position / task	Topic / project (funding organization)	From / sending organization / partner	Year / duration
<b>Bahraini Hasani, Maryam</b>	PostDoc	High wear resistant and ductile MMC tools used for metal forming and electronic waste recycling ( <i>CTI project: LowWearTool</i> )	EPF-Lausanne, CH	2007 / 2 y
<b>Bakumov, Vadym</b>	PostDoc	Polymer-derived Si/C/N sub-millimetre thick miniaturized components fabricated by direct casting (as part of CTI project: <i>CeraMicro – Development of a modified MEMS processing route for the production of accurate wear resistant ceramic components</i> )	TU Bergakademie Freiberg, D	2008 / 2 y
<b>Barreiro, Vanessa</b>	Internship	Differences in mechanical properties and failure analysis between the standard processed ZrO <sub>2</sub> and post vacuum thermal treated ZrO <sub>2</sub>	ETH-Zürich, CH Prof. A. Studart	2017 / 2 mt
<b>Chen, Yan</b>	Guest PhD student	Layered YSZ/SCSZ/YSZ electrolytes for intermediate temperature SOFC	Univ. of Central Florida, USA, Prof. N. Orlovskaya	2011 / 6 mt
<b>Chintan, Shah</b>	Internship	Cooperation in project <i>Electrically conductive CNF-oxide ceramic composites</i>	Queen Mary Univ. of London, UK, Dr. M.J. Reece	2004 / 5 mt
<b>Dalcanale, Federico</b>	PhD student	Implantable Ceramic MEMS Electrodes for Medical Devices ( <i>SNF-project CeraMed</i> )	ETH-Zürich, CH Prof. M. Niederberger	2012 / 3 y
<b>Delporte, Marc</b>	MSc diploma thesis	Ti-activation of Al <sub>2</sub> O <sub>3</sub> ceramic foams	ENSCI Limoges, F, Prof. A. Smith	2004 / 6 mt
<b>Duszova, Annamaria</b>	MSc diploma thesis	Electrically conductive zirconia reinforced with CNF	Technical Univ. Kosice, SL, Prof. T. Kuffa	2006 / 3 mt
<b>Eblagon, Fernando</b>	Internship	Manufacturing process optimization and MathCad modeling of multilayer ceramic laminates	Queen Mary University of London, UK, Dr. M.J. Reece	2002 / 3 mt
	Scientist	Micro-structured ceramic composite cutting edges for industrial wood machining ( <i>CTI Feasibility-Study: WoodTool</i> )	Queen Mary Univ. of London, UK	2004 / 1 y
<b>Fedele, Roberto</b>	Guest-Prof	Optical crack growth measurement on ceramic under static and cyclic load	Politecnico di Milano, Italy Departm of Civil and Environmental Engineering	2017 / 2 mt
<b>Fischer, Simon</b>	MSc diploma thesis	In-situ study with the ESEM of the reaction mechanism during melt infiltration promoted by an activator on Al <sub>2</sub> O <sub>3</sub> /Fe- and Al <sub>2</sub> O <sub>3</sub> /Ni-CMC's	Univ. Fribourg, CH, Prof. B. Grobety	2002 / 8 mt
<b>Fleischhauer, Felix</b>	PhD student	Mechanical reliability of electrolyte supported Solid Oxide Fuel Cells ( <i>BFE &amp; SER project: SOF-CH ESC</i> )	Montan Univ. of Leoben, A, Prof. R. Danzer	2012 / 3 y
<b>Fuso, Salvatore</b>	Technician	Physical Characterization	Empa, Lab HPC, CH	2002 - 2008 (retired)
<b>Glauche, Andreas</b>	Internship	Herstellung verschleissfester ZrO <sub>2</sub> /Stahl-MMCs für tribologische Untersuchungen	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2006 / 6 mt
<b>Gorjan, Lovro</b>	PostDoc	JOLIE-Joining of Lightweight Alloys to advanced FGM metal ceramic materials ( <i>European ERA-NET / MATERA / CTI project JOLIE</i> )	Univ. of Ljubljana and Jozef Stefan Institute, SLO Prof. T. Kosmac	2013 / 2 y
<b>Guo, Zhiqian</b>	PhD student	Development of Si <sub>3</sub> N <sub>4</sub> -Based Composites for High Temperature Sensor Application ( <i>CTI-TopNano21 project: HITCLES</i> )	Queen Mary Univ. of London, UK, Dr. M.J. Reece	2003 / 3 y
<b>Hegedusova, Lucia</b>	PostDoc	SINTEX - Processing and properties of textured Si <sub>3</sub> N <sub>4</sub> ceramics ( <i>SCIEX NMS-CH grant</i> )	Slovak Academy of Science, Structural Ceramics Departm., SL-Kosice, Prof. J. Dusza	2012 / 6 mt

<b>Hübler,</b> Andreas	MSc diploma thesis	Poröse Keramiken mit 3-D-Struktur für MMC-Herstellung über Ti-aktivierte Infiltration	Univ. Kassel, D, Prof. A. Brückner-Foit	2004 / 6 mt
<b>Jahn,</b> Elisabeth	MSc diploma thesis	Alumina-SrO composites for Industrial Woodcutting (part of CTI project PerWoodCut)	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2014 / 6 mt
<b>Jiang,</b> Bo	PostDoc	Development of a Low Cost Ceramic Buoyancy Sphere (FP7 project CeraSphere)	EPF-Lausanne, CH	2014 / 2y
<b>Köbel,</b> Stefan	PostDoc	Ceramic based composites	Empa, Lab HPC, CH	2003 / 1 y
<b>Krauss,</b> Günter	PostDoc	Failure tolerant MMC by pressureless melt infiltration (EUREKA-CTI project: SchaToWe)	ETH-Zürich, CH	1999 / 2 y
<b>Kubrin,</b> Roman	PostDoc	Development of red ceramic composite material for use in high quality watch and jewelry cases and bracelets (CTI project ORCA)	TU-Hamburg-Harburg, DE	2014 / 2y + 4 mt
<b>Kuzma,</b> Izabela	MSc diploma thesis	Tape Casting and Manufacturing of $\text{Si}_3\text{N}_4$ based laminates	AGH Univ. of Science and Technology, PL, Prof. J. Lis	2003 / 6 mt
<b>Lemster,</b> Katja	Scientist	Processing, microstructure and mechanical properties of MMCs prepared by pressureless Ti-activated infiltration using Fe- and Ni-base alloys	ETH-Zürich, CH	2001 / 4 y
<b>Leoni,</b> Thomas	BSc diploma thesis	Aktivierung poröser $\text{Al}_2\text{O}_3$ -Preformen unter Verwendung eines $\text{Ti}_x\text{O}_y$ -Nanopartikel-haltigen Schlickers	FH beider Basel, CH, Prof. U. Pieles	2005 / 5 mt
<b>Lugovy,</b> Mykola	Guest scientist	Cooperation in FP5- Copernicus project LAMINATES: $\text{Si}_3\text{N}_4$ based laminar and functionally gradient ceramic composites for engineering applications	Institute for Problems of Materials Science, Kiev, Ukraine	2002 / 1 mt
	Guest scientist	Mechanical behavior of ultra-high temperature $\text{ZrB}_2 - \text{SiC}$ ceramic composites (SNF grant: Individual shot research visit)	Institute for Problems of Materials Science, Kiev, Ukraine	2011 / 3 mt
	Guest scientist	Short visit to investigate the mechanical response and fatigue behavior of ultra-high temperature ceramics	Institute for Problems of Materials Science, Kiev, Ukraine	2017 / 3 mt
<b>Mata Osoro,</b> Gustavo	PostDoc	Thermo-mechanical tests (WP of FP7 project ADMACOM: Advanced manufacturing routes for metal/Composite components for Aerospace)	Laboratoire de Chimie de la Matière Condensée de Paris	2014 / 2y + 3 mt
<b>Miazga,</b> Aleksandra	Guest PhD student	Determination of fracture toughness of composite materials $\text{Al}_2\text{O}_3$ -Ni obtained by gelcasting method	Warsaw University of Technology, Materials Science and Engineering, PL, Prof. K. Konopka	2012 / 3 mt
<b>Michalek,</b> Martin	PostDoc	Development of new ceramic composite thermal protection systems for future high efficiency gas turbines (CTI project CeraTherm)	--	2013 / 2.5 Y
	Scientist	High strength xyz alumina (CTI project HITRAL)	--	2016 / 2 Y
<b>Michalkova,</b> Monika	Guest PhD student	CNF- $\text{Al}_2\text{O}_3$ ceramic composites	Slovak Academy of Science, Inst. of Inorganic Chemistry, SL-Bratislava, Prof. P. Sajgalik	2009 / 6 mt
	PostDoc	ElectroCeram - Preparation and properties of $\text{Si}_3\text{N}_4/\text{MgSiN}_2/\text{CNFs}$ composite for electronic devices (SCIEX NMS-CH grant)	Slovak Academy of Science, Inst. of Inorganic Chemistry, SL-Bratislava, Prof. P. Sajgalik	2012 / 6 mt
	Scientist	High strength xyz alumina (CTI project HITRAL)	--	2016 / 2Y
<b>Mitrensis,</b> Eleni	MSc diploma thesis	Static and Dynamic Mechanical Properties of $\text{ZrB}_2$ - $\text{SiC}$ Ultra High Temperature Ceramic Composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2013 / 6 mt

<b>Morawa,</b> Katarzyna	MSc diploma thesis	Functionally graded structural laminated ceramics	Krakow Univ. of Mining and Metallurgy, PL, Prof. J. Blazewicz	2004 / 6 mt
<b>Neubert,</b> Markus	BSc diploma thesis	Static and dynamic mechanical properties of ZrB <sub>2</sub> - 30wt%SiC Ultra-High-Temperature ceramic composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2011 / 6 mt
<b>Neumann,</b> Marc	BSc diploma thesis	Fracture surface analysis of ZrB <sub>2</sub> -SiC Ultra-High- Temperature ceramic composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2016-17 / 6 mt
<b>Ostermay,</b> Ina	MSc diploma thesis	High-temperature cantilever sensor based on Si <sub>3</sub> N <sub>4</sub> - MoSi <sub>2</sub> -composite: Development and characterization	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2004 / 6 mt
<b>Orlovskaya,</b> Nina	Guest scientist	Cooperation in FP5- Copernicus project LAMINATES: <i>Si<sub>3</sub>N<sub>4</sub> based laminar and functionally gradient ceramic composites for engineering applications</i>	Drexel Univ., USA	2004 / 1 mt
	Guest scientist	Short visits to prepare projects and cooperate in fields such as Laminates, Composites, B <sub>4</sub> C and SOFC	Univ. of Central Florida, USA	2009, 2010, 2011, 2012, 2017
<b>Pakosch,</b> Dana	MSc diploma thesis	Ceramic-CNT composites for SOFC interconnects	Clausthal Univ. of Technology, D, Prof. J. Heinrich	2008 / 6 mt
<b>Parmar,</b> Paresh	Internship	Cooperation in project <i>Production of Al<sub>2</sub>O<sub>3</sub>/steel- MMCs by using different species of steel</i>	Queen Mary Univ. of London, UK, Dr. M. Reece	2007 / 6 mt
<b>Pathak,</b> Siddhartha	MSc diploma thesis	Mechanical behavior of multifunctional MIEC perovskites	Drexel Univ., USA, Prof. N. Orlovskaya	2004 / 6 mt
<b>Roulin,</b> Marlyse	PostDoc	Development of a filter system	University of Geneva, CH	2000 / 10 mt
<b>Schlenther,</b> Evelyn	BSc diploma	Influence of infiltration atmosphere and carbon on activated pressureless infiltration of alumina/iron based alloy MMCs	FH Koblenz/Höhr- Grenzhausen, D Prof. J. Kriegesmann	2008 / 6 mt
	Scientist	MMC		2009 / 3 mt
	MSc diploma	Microstructural Influence on the Impact Toughness of infiltrated Al <sub>2</sub> O <sub>3</sub>  P/Steel-Matrix Composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2009 / 6 mt
	PhD student	Processing aspects for the toughening of infiltrated Al <sub>2</sub> O <sub>3</sub>  P/Steel Composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2010 / 3 Y
<b>Sliuniaiev,</b> Viktor	Guest scientist	Mechanical behavior and residual stress associated toughening mechanisms of UHT-ZrB <sub>2</sub> -SiC ceramic composites ( <i>SNF grant: Individual shot research visit</i> )	Institute for Problems of Materials Science, Kiev, Ukraine	2014 / 3 mt
<b>Steinmetz,</b> David	MSc diploma thesis	Structural and mechanical properties of multifunctional MIEC perovskites for energy applications	Drexel Univ., USA, Prof. N. Orlovskaya	2004 / 6 mt
<b>Strehler,</b> Claudia	Scientist / PhD student	Netshape manufacturing of ceramic matrix based cutting tools for industrial wood machining ( <i>CTI project CerWoodCut</i> )	ETH-Zürich, CH / TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2008 / 3 Y
	PostDoc	Performance wood cutting via a light weight ceramic matrix composite knife based tool system for high speed industrial wood machining ( <i>CTI project PerWoodCut</i> )		2011 / 2Y
<b>Subbotin,</b> Vladimir	Guest scientist	Cooperation in FP5- Copernicus project LAMINATES: <i>Si<sub>3</sub>N<sub>4</sub> based laminar and functionally gradient ceramic composites for engineering applications</i>	Institute for Problems of Materials Science, Kiev, Ukraine	2002 / 3 mt
<b>Swanson,</b> Matt	MSc diploma thesis	Mechanical properties characterization of ZrB <sub>2</sub> - based materials	Michigan Technological Univ., USA, Prof. N. Orlovskaya	2006 / 6 mt

<b>Trentini,</b> Elena	Internship	Optimization of SB procedure to introduce sharp cracks in brittle materials & Preparation of AlN/cast iron MMCs by pressureless infiltration.	University of Trento, I, Prof. V. Sglavo	2000 / 6 mt
<b>Trevisani,</b> Victor	Internship (IASTE)	Collaboration in project <i>Fabrication and Optimization of MMCs</i>	Universidade Federal de Sao Carlos, Brazil	2003 / 6 mt
<b>Vasic,</b> Srdan	PhD student	Activation mechanism and kinetic study of Fe-based alloy infiltration into porous $\text{Al}_2\text{O}_3/\text{Ti}$ preforms	University Fribourg, CH, Prof. B. Grobety	2004 / 3 y
<b>Verbylo,</b> Dmytro	Guest scientist	Mechanical behavior of perovskites under cyclic loading ( <i>SNF grant: Individual short research visit</i> )	Institute for Problems of Materials Science, Kiev, Ukraine	2017 / 3 mt
<b>Wittig,</b> Daniela	MSc diploma thesis	High temperature corrosion of $\text{Si}_3\text{N}_4$ composites	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2004 / 6 mt
	PhD student	Pressureless infiltrated alumina and zirconia based steel - MMCs	TU Bergakademie Freiberg, D, Prof. Ch. Aneziris	2005 / 3 y
<b>Zberg,</b> Bruno	Internship	Collaboration in project <i>Fabrication and optimization of MMCs</i>	ETH-Zürich, CH	2003 / 2 mt
<b>Zinz,</b> Siglinde	BSc diploma thesis	Oxidation / corrosion of $\text{Si}_3\text{N}_4$ and SiC composites	FH Nürnberg, D, Prof. T. Frey	2004 / 5 mt