

Key Information

Duration:

4 years (this period can be shorter depending on the availability of a PhD thesis)

Language:

English

Entry Requirements:

Master's degree in Metallurgy (transcript of records), an adequate level of English proficiency (certificate or another document).

Tuition fees (2015/2016):

€ 1 850 (the cost does not include accommodation and living expenses).

Accommodation:

on-campus accommodation is available. Costs (2015/2016): single ensuite room: € 45 per month, twin ensuite room: € 30 per month.

Practicalities:

airport transfer, an invitation letter to apply for a Russian study visa and an optional survival course of Russian as a foreign language are provided by Siberian Federal University.

Further details:

SibFU's Graduate School aspirantura@sfu-kras.ru, tel.: +7 391 291-28-31

Programme Leader

Professor Sidelnikov's research interests are about developing new technologies and equipment to produce press-products from non-ferrous metals and alloys using combined processing methods.

Overview

Doctoral students do research at the Laboratories of Metal Forming under the supervision of Professor Sergey B. Sidelnikov. Their research focuses on developing new technologies and equipment to produce press-products from non-ferrous metals and alloys using combined processing methods. The scientists from the department received over fifty patents and certificates, they published over a hundred research papers and five books.

Contacts

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Publications

Sidelnikov, S.B. and others. Research of the process combined rolling-extruding. Technology of light alloys. 1993. № 11. P. 41 – 44.

Sidelnikov, S.B. and others. Modeling the combined process of continuous casting and rollingextruding of non-ferrous metals and alloys. Non-ferrous metallurgy. News of Higher educational nstitutions. № 5. 2004. P. 34-39.

Sidelnikov, S.B. and others. Modelling and developing processes of integrated aluminum and aluminum alloys processing based on the methods of continuous casting, rolling and extrusion Hutnik. Wiadomosci Hutnicze. Nr 2. 2005. P. 121-123.

Sidelnikov, S.B. and others. Combined methods of treatments of non-ferrous metals and alloys: a monograph. M.: MAKS Press, 2005. 344 p.

Sidelnikov, S.B. and others. Development of devices and technologies to obtain wire from hard aluminum alloys using the methods of combined processing. Bulletin of the Magnitogorsk State Technical University named after G.I. Nosov. Magnitogorsk. № 4. P. 30-34.

Sidelnikov, S.B. and others. Application methods of the combined casting and rolling-extruding to obtain electrotechnical wire rod from aluminum alloys / Innovative technologies in metallurgy and mechanical engineering: Collection of scientific papers. Yekaterinburg: Publ. house of Ural University, 2012. P. 727-729

Sidelnikov, S.B. and others. Comparative evaluation strength characteristics of deformed semifinished products from alloy Al–Zr system, obtained under different schemes of combined processing. Non-ferrous metals. №1. 2013. P. 86-90.

Other research areas

Developing science intensive technologies to produce precious metals and alloys (supervisor: Professor Nikolai Dovzhenko); Producing electro conductive materials with high wear resistance from powders, shavings from non-ferrous metals and alloys (supervisor: Dr Nikolai Zagirov); creating production lines to implement low-waste production technology of continuous extrusion (supervisor: Professor Yuriy Gorokhov).

Publications

Sidelnikov, S.B., Gorokhov, Y.V., Belyaev, S.V. Innovative combined technology during processing of metals. Journal of Siberian Federal University. Engineering & Technologies. 2015. v. 2. № 8. p. 185. Biront, V.S., Anikina, V.I., Zagirov, N.N. and others. Structure of heterogeneous chip materials from non-ferrous alloys: monograph. – Novosibirsk: Sibprint, 2011. 130 pp. Gorokhov, Y.V., Sherkunov, V.G., Dovzhenko, N.N. and others. Fundamentals of design processes of continuous extrusion of metals: monograph. – Krasnoyarsk: Siberian Federal University, 2013. 224 pp. Biront, V.S., Dovzhenko, N.N., Mamonov, S.N. and others. Materials Science. In Metal Science of palladium and its alloys. Krasnoyarsk, 2007. 152 pp.

University

Siberian Federal University (SibFU) with over 35 000 students is one of the most vibrant Russian universities. Annually, more than 200 visiting professors – leading researchers from the UK, Germany, Spain and USA – visit SibFU to give lectures and attend conferences.

Siberian Federal University receives funding from the RF Goverment that supports research projects developed under the supervision of prominent Russian scientists and international researchers. One of the research projects is carried out at the laboratory created in 2014 and supervised by Professor Ari Laptev (Imperial College London. KTH, Director of Institut Mittag-Leffler). The laboratory staff includes SibFU's professors August Tsikh, Alexander Kytmanov, and Sergey Tsarev.