

REGISTRATION FORM FOR CZECH SCIENTIFIC INSTITUTION

1. Research institution data (name and address):

Faculty of Arts
Palacký University Olomouc
Křížkovského 511/10
771 80 Olomouc
Czech Republic

2. Type of research institution: Public university (veřejná vysoká škola)

3. Head of the institution: prof. MUDr. Martin Procházka, Ph. D. – rector

4. Contact information of designated person(s) for applicants:

doc. Mgr. Dan Faltýnek, Ph.D. – Department of General Linguistics, Head of Lab of Psycholinguistics
dan.faltynec@upol.cz, +420 604 127 140
Křížkovského 14, Olomouc 779 00 Olomouc, Czech Republic

5. Research discipline in which the strong international position of the institution ensures establishing a Dioscuri Centre:

Arts, Humanities and Social Sciences: *The study of the human past* - history, archaeology, ethnology, cultural anthropology

6. Description of important research achievements from the selected discipline from the last 5 years including a list of the most important publications, patents, or other results:

Linguistics research at Palacký university is primarily concerned with language variation, development, and history. We use both quantitative and qualitative methods to investigate questions ranging from the individual speaker profile to language shift and change, as well as language contact and history.

The list of key topics covered by our research includes: *historical linguistics, language contact, Altaic, Austronesian, Indo-European, Japanese, Korean, Papuan, Sinitic, sign language, biosemiotics, L2 acquisition, language shift and language attrition, conversation analysis, stylometry, fieldwork methodology, anthropological linguistics, NLP, wordnets, grammar engineering*

Selected Recent Publications

ANDRES, J., BENEŠOVÁ, M, LANGER, J. Towards a Fractal Analysis of the Sign Language. *Journal of Quantitative Linguistics*. 2019, 28(2).

BAREŠOVÁ, I., PIKHART, M. Going by an English name: The adoption and use of English names by young Taiwanese adults. *Social Sciences*, 2020, 9(4):1-11. DOI 10.3390/SOCSCI9040060

COUPE, A., KRATOCHVÍL, F. Asia before English. Bolton, K. Botha, W. Kirkpatrick, A. *The Handbook of Asian Englishes*. Hoboken (NJ): Wiley-Blackwell, 2020, pp. 15-48.

FALTÝNEK, D – MATLACH, V. Hapax remains: Regularity of low-frequency words in authorial texts. *Digital Scholarship in the Humanities*, 2021; <https://doi.org/10.1093/llc/fqab077>

FALTÝNEK, D., MATLACH, V., LACKOVÁ, L. Bases are Not Letters: On the Analogy between the Genetic Code and Natural Language by Sequence Analysis. *Biosemiotics* 12, 289–304 (2019). <https://doi.org/10.1007/s12304-019-09353-z>

KLAMER, M., EDWARDS, O., FRICKE, H., GIALITAKI, Z., MORO, F., PALMÉR, A., SAAD, G., SULISTYONO, Y., VISSER, E., WU, J. Practicalities of language data collection and management in and around Indonesia. *Wacana-Jurnal Ilmu Pengetahuan Budaya-Journal of the Humanities of Indonesia*, 2021, 22(2): 467-521. DOI 10.17510/wacana.v22i2.930

KRATOCHVÍL, F., MOELJADI, D., DELPADA, B., KRATOCHVÍL, V., VOMLEL, J. Aspectual pairing and aspectual classes in Abui. *STUF-Language Typology and Universals*, 2021, 74(3-4): 621-657. DOI 10.1515/stuf-2021-1046

MATLACH, V., JANEČKOVÁ, B., DOSTÁL, D (2022): The Voynich manuscript: Symbol roles revisited. *PLoS ONE* 17(1): e0260948. <https://doi.org/10.1371/journal.pone.0260948>

MATLACH, V.; DOSTÁL, D.; NOVOTNÝ, M. Secondary Structures of Proteins Follow Menzerath–Altmann Law. *Int. J. Mol. Sci.* 2022, 23, 1569. <https://doi.org/10.3390/ijms23031569>

SAUERLAND, U., HOLLEBRANDSE, B., KRATOCHVÍL, F. When hypotaxis looks like parataxis: embedding and complementizer agreement in Teiwa. *Glossa-A Journal of General Linguistics*, 2020, roč. 5, č. 1, s. 89.1-30. ISSN 2397-1835. DOI 10.5334/gjgl.931

SIO, JU., TANG, S. Two types of aa3-nominals in Cantonese. *Language and Linguistics*, 2020, 22(2): 80-103. DOI 10.1075/lali.00058.sio

SIO, JU., MORGADO DA COSTA, L. Building the Cantonese Wordnet. Fellbaum, Ch. Vossen, P. Rudnicka, E. Maziarz, M. Piasecki, M. *Proceedings of the Tenth Global Wordnet Conference July 23–27, 2019, Wrocław (Poland)*. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej, 2019, pp. 206-215.

SHIN, G., PARK, SH. Isomorphism and language-specific devices in comprehension of Korean suffixal passive construction by Mandarin-speaking learners of Korean. *Applied Linguistics Review*, 2021, DOI 10.1515/applirev-2020-0036

SHIN, G., JUNG, BK. Automatic analysis of passive constructions in Korean: Written production by Mandarin-speaking learners of Korean. *International Journal of Learner Corpus Research*, 2021, 7(1): 53-82. DOI 10.1075/ijlcr.20002.shi

7. List of no more than 3 important research projects in the selected discipline awarded in national and international calls to the institution in the last 5 years:

Project name: Sinophone Borderlands: Interactions at the edges

PI: Ondřej Kučera

Funding institution: European Regional Development

Fund Funding scheme: OP Research, Development and Education

Available funding: 175M CZK

Funded period: 1. 7. 2018 – 30. 6. 2023

Objective: *The main objective of this project is to present a unique concept of the Sinophone world based on interregional dialogue and provide a new angle on the global impact of the rise of China. Political, economic, linguistic, and sociological analyses will be presented to both Czech and EU politicians. The research team is strengthened by scholars from abroad, carrying out cross-cultural interdisciplinary field research in Taiwan, Russia, Mongolia, Uzbekistan, Vietnam, Kazakhstan, Kyrgyzstan and in other regions and countries.*

The infrastructure of the Research Centre will be modernised, and three laboratories will be established within the project (Language, Computer analyses and Material culture laboratories). These will make it possible to better analyse and understand animosity between competition and cooperation processes and identify current trends in migration activity between China and the outside world.

Project name: Fully Customized: personalization using low-frequency lexicon structure

PI: Dan Faltýnek

Funding institution: Technology Agency of the Czech Republic

Funding scheme: GAMA 2, Proof-of-concept

Available funding: 1,6M CZK

Funded period: 1. 12. 2021 – 31. 12. 2022

Objective: *The project develops the patent comprising linguistic personalization of every single individual concerning digital communication. Application concerning full personalisation utilises recent disclosure of regular reoccurrence of a specific part of the authorial low-frequency lexicon. It turns out that the recurring low-frequency lexicon of a particular person determines the text vicinity of the author's text which contains – depending on that – stable characteristics. A description of language devices attachment into this phenomenon allows us to profile a person (in analogy to standard psychometrics, Big-5 etc.), to determine her or his unconsciously internalized sentiment (referred to yet as deep sentiment) and to create direct communication with the person using his or her specific language habits. The objective of the project is to develop algorithms performing and ensuring personalized communication.*

Project name: Chinese Intelligent Language Learning (CHILL) – Using Grammar Engineering Models for Automated Error Detection

PI: Luis Morgado da Costa

Funding institution: European Commission

Funding scheme: Horizon 2020 EU.1.3.2

Available funding: € 145k

Funded period: 1. 11. 2021 – 31. 10. 2023

Objective: *This Action will produce a high-precision error detection computational system for Mandarin Chinese, which diagnoses the linguistic source of grammatical errors, and uses this information to provide corrective feedback to learners. The Action includes an in-depth syntactical analysis and computational implementation of both the structure of Mandarin Noun Phrases and related common errors. The focus will lie on quantification, reference/deixis, cognitive status and modification. The Action will make use of well-grounded data-driven interdisciplinary methodologies, integrating standard methodologies for formal linguistic analysis and methodologies for software development from the field of Computer Science.*

8. Description of the available laboratory and office space for a Dioscuri Centre + 9. List of the available research equipment for a Dioscuri Centre:

The linguistics group possesses three laboratories which enable us to explore the reality of language in its physical form (sound lab), in the human brain (psycholinguistics lab), and in the text (computational lab). Each of the labs has its director who is surrounded by other scholars and students who share the interest in the same methodological approach. The labs have their dedicated spaces with facilities for teaching (computer classroom) and research (equipment and expertise). All three labs collaborate in interdisciplinary research, trying to bridge the traditional gaps between various subfields of linguistics.

Language Diversity Lab (George Saad)

- Sound booth
- Recorders (Zoom), microphones (Sennheiser, Shure), headphones
- Video recorders (Zoom, Canon)
- Tripods (Manfrotto)
- Computers for sound and video editing
- Freeware software for phonetic analysis (Praat)

Quantitative linguistics and Psycholinguistics Lab (Martina Benešová, Dan Faltýnek)

- SMI eye-tracker (500 Hz)
- SMI eye-tracker glasses

Computational linguistics and big data lab (Shin Gyu-Ho, Francis Bond, Vladimír Matlach)

- Quita software (text analysis, data analysis and output visualization, data-mining)
- LIWC licence
- LUKE software (deep sentiment analysis)
- Computer lab for students
- Own Word-sense annotation tools
- Multilingual Wordnet infrastructure

10. List of the additional benefits (other than listed in the conditions for hosting a DC, see invitation) that the Institution declares to provide for a Dioscuri Centre (i.e.: additional funds, personal benefits, dual career options, relocation support or other):

Palacký University provides a number of benefits for its employees. The most frequently provided benefits include meal vouchers, various insurance contributions or kindergarten for employees' children. An interesting item in the list of benefits is the offer of discounted calls. Employees and their family members can take advantage of very favourable cell-phone services provided by CellBest.

Other benefits include for instance discounted sport activities in university facilities, discounts on various types of cultural activities in Olomouc, the possibility to regular download the full version of Microsoft Office Professional for free for up to five devices of one user and at the same time to use the Office 365 suite of services, then discounts on the purchase of books and publications in the UP-Publishing House or on the purchase of goods in UPoint. University staff can also obtain a 10 percent discount on purchases at OBI or discount to the Premiere Cinemas multiplex.

The relocation support is also available.

There are other benefits related to Social fund, including subsidy to life insurance or pension fund.

11. Other information about the internationalization of the research institution, international researchers employed at the institution, the availability of English language seminars etc.:

The involved departments have an international profile, in having staff members from various countries. Therefore the administration and communication is bilingual and the international staff are offered free Czech classes, while the administrative staff are continuously upgrading their English skills.

The process of integrating international staff has helped us to build a support structure for dealing with all practical and official matters that they international staff face. Since the HR Awards obtained by the university, this support structure is also integrated on the institutional level.

Finally, the involved department actively seek EU and international funding and offer pre and post award support in this effort. We also participate in larger EU funded projects, such as the RIA consortium and are recipients of MSCA Fellows from abroad.

Needless to say, we host international conferences (International Conference on Austronesian Linguistics, European Association for Chinese Linguistics, Cantonese linguistics workshop, EuroSEAS, European Association for Chinese Studies) and organise an Annual Conference on Asian Studies (ACAS) whose participants are overwhelmingly from abroad.

We participate in a number of internship programs with a number of Asian countries that offer practical experience to Asian students to teach and train students interested in the respective Asian culture and language.

Palacky University (PU) has in its Strategic Development Plan for the Teaching and Research Activities 2021+ declared that one of the priorities is internationalization. In that respect, PU supports all international activities in terms of student and staff exchange and research cooperation within EU and beyond. PU has been a very experienced institution in international cooperation and has been the most successful applicant among the Czech universities in mobility scheme. Faculty of Arts has the highest share of international students and staff that amounts to over 40% of the university volume. Due to the scheme of study programmes that offered also in foreign languages, the campus has been truly international. The faculty supports foreign national in providing classes in Czech language that help the foreign nationals overcome not only language but cultural barriers. In addition, important university documents and communication is conducted bilingually, ie. in Czech and in English. Palacky University has now applied for a mobility scheme that includes 11 out of 12 world regions thus it makes every effort to become internationalized to the greatest degree possible. Key administrative staff speaks English which helps newly arrived foreigners intergrate quickly into Palacky University community. Should foreign researchers be accompanied by family members, children can attend both English kindergarden as well as primary and secondary school where the instruction is in English. Palacky University is part of the Aurora project which is a European Universities project funded by the EU and which strengthens international cooperation. Before the outbreak of the pandemic, in 2019, 4497 foreign students from 108 countries studied at University Palacký, which was 452 more students than in the previous year. If the numbers of foreign students are compared with 2008, there are 2355 more today. Within a decade, the number of foreign students at the university has therefore increased by more than hundred percent. The increase in the number of foreign students corresponds to the current strategy of the university. Palacky University believes that the key to success in the global world of quality university education is targeted, purposeful internationalization. In 2019 PU received the prestigious European Association for International Education (EIAE) Institutional Award for its successful international strategy.