

Meeting with Group Leaders

April 23, 2021

Zdenek Hostomsky

Agenda

- Most significant publications 2020 contest
- IOCB Employee Satisfaction Survey
- IOCB Data Repository
- Nominations to the Subsidiary Authorities of the CAS
- IOCB postdoc fellowships
- Miscellanea

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- PHYS Physical and Theoretical ChemistryCHEM Medicinal and Organic ChemistryBIO Biochemistry and Molecular Biology
- **PHYS:** 9
- CHEM:
- **BIO**:

- 9 (11 for 2019)
- 9 (8 for 2019)
- **11** (8 for 2019)



o. Categor	Author	Laboratory	Article / Publication	Journal
CHE	A Galeta J.	Vrábel	A Systematic Study of Coumarin–Tetrazine Light-Up Probes for Bioorthogonal Fluorescence Imaging	Chem. Eur. J.
CHE	A Prakash	Beier	Protonation of CH3N3 and CF3N3 in Superacids: Isolation and Structural Characterization of Long-Lived Methyl- and Trifluoromethylamino Diazonium Ions	
CHE	1 Ondruš M.	Hocek	Enzymatic synthesis of hypermodified DNA polymers for sequence-specific display of four different hydrophobic groups	Nucleic Acids Res.
CHE	Veselovská L.	Hocek	Synthesis and Cytotoxic and Antiviral Activity Profiling of All-Four Isomeric Series of Pyrido-Fused 7-Deazapurine Ribonucleosides	Chem. Eur. J.
CHE	A Hurtado C.S.	Kaleta	Regular Two-Dimensional Arrays of Surface-Mounted Molecular Switches: Switching Monitored by UV-vis and NMR Spectroscopy	J. Am. Chem. Soc.
CHE	A Reyes-Gutiérrez P.	Pospíšil (Michl)	Helquats as Promoters of the Povarov Reaction: Synthesis of 1,2,3,4-Tetrahydroquinoline Scaffolds Catalyzed by Helicene-Viologen Hybrids	ChemPlusChem
CHE	A Čechová L.	Dračínský	Polysubstituted 5-Phenylazopyrimidines: Extremely Fast Non-Ionic Photochromic Oscillators	Angew. Chem. Int. Ed.
CHE	۸ Šála M.	Nencka	Novel Human Neutral Sphingomyelinase 2 Inhibitors as Potential Therapeutics for Alzheimer's Disease	J. Med. Chem.
CHE	A Nejedlý J.	Starý	Synthesis of Racemic, Diastereopure, and Enantiopure Carba- or Oxa[5]-, [6]-, [7]-, and -[19]helicene (Di)thiol Derivatives	J. Org. Chem.
BIC	Began J.	Stříšovský	Rhomboid intramembrane protease YggP licenses bacterial membrane protein quality control as adaptor of FtsH AAA protease	EMBO J.
BIC	Hudeček O.	Macíčková Cahová	Dinucleoside polyphosphates act as 5'-RNA caps in bacteria	Nature Commun.
BIC	Dzianova P.	Jiráček	The efficiency of insulin production and its content in insulin-expressing model β-cells correlate with their Zn2+ levels	Open Biol.
BIC	Ondruš M.	Hocek	Enzymatic synthesis of hypermodified DNA polymers for sequence-specific display of four different hydrophobic groups	NAR
BIC	Hrcka Krausová B.	Kudová	Site of Action of Brain Neurosteroid Pregnenolone Sulfate at the N-Methyl-D-Aspartate Receptor	J. Neurosci.
віс	Lux V.	Řezáčová	Molecular Mechanism of LEDGF/p75 Dimerization	Structure
BIC	Janovec V.	Weber	Toll-like receptor dual-acting agonists are potent inducers of PBMC-produced cytokines that inhibit hepatitis B virus production in primary human hepatocytes	Scientific reports
віс	Dinesh DC	Bouřa	Structural basis of RNA recognition by the SARS-CoV-2 nucleocapsid phosphoprotein	PLOS Pathogens
віс	Krafčíková P.	Bouřa	Structural analysis of the SARS-CoV-2 methyltransferase complex involved in RNA cap creation bound to sinefungin	Nature Commun.
BIC	Jaklová Dytrtová J.	Kašička	Triazoles and aromatase: The impact of copper cocktails	Environmental Pollution
BIC	Houštecká R.	Mareš	Biomimetic Macrocyclic Inhibitors of Human Cathepsin D: Structure-Activity Relationship and Binding Mode Analysis	J. Med. Chem.
L РНУ	S Škerle J.	Stříšovský	Membrane Protein Dimerization in Cell-Derived Lipid Membranes Measured by FRET with MC Simulations	Biophys J
РНУ	S WuT.	Bouř	Two Spectroscopies in One: Interference of Circular Dichroism and Raman Optical Activity	Angew. Chem. Int. Ed.
B PHY	5 Tomeček J.	Bouř	Density Functional Computations of Vibrational Circular Dichroism Spectra beyond the Born–Oppenheimer Approximation	J. Chem. Theory Compu
РНУ	S Andris E.	Rulíšek	Closed Shell Iron(IV) Oxo Complex with an Fe–O Triple Bond: Computational Design, Synthesis, and Reactivity	Angew. Chem. Int. Ed.
РНҮ	5 Bím D.	Rulíšek	Proton-Electron Transfer to the Active Site Is Essential for the Reaction Mechanism of Soluble Δ9-Desaturase	J. Am. Chem. Soc.
РНҮ	5 Jaroš A.	Straka (Rulíšek)	From π Bonds without σ Bonds to the Longest Metal–Metal Bond Ever: A Survey on Actinide–Actinide Bonding in Fullerenes	
РНҮ	S Slanina T.	Slanina	Impact of Excited-State Antiaromaticity Relief in a Fundamental Benzene Photoreaction Leading to Substituted Bicyclo[3.1.0] hexenes	J. Am. Chem. Soc.
РНҮ	Roncevic I.	Kaleta / Michl	CB11H10 – and Related Carborenes	Inorg. Chem.
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IOCB Employee Satisfaction Survey

Jiří Vondrášek



(I can't get no satisfaction ...)

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IOCB Prague

Survey on "Overall employee satisfaction in the organization IOCB CAS" Slide number

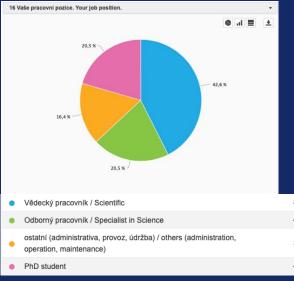
Statistika respondentů

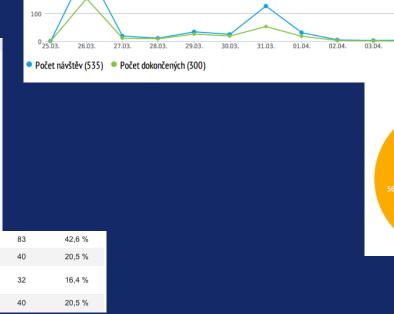
535	300	2	233	56,1 %
Počet	Počet	Počet	Pouze	Celková úspěšnost
návštěv	dokončených	nedokončených	zobrazení	vyplnění dotazníku

Historie návštěv (26. 03. 2021 – 07. 04. 2021)

300

200





%



08.04

07.04.

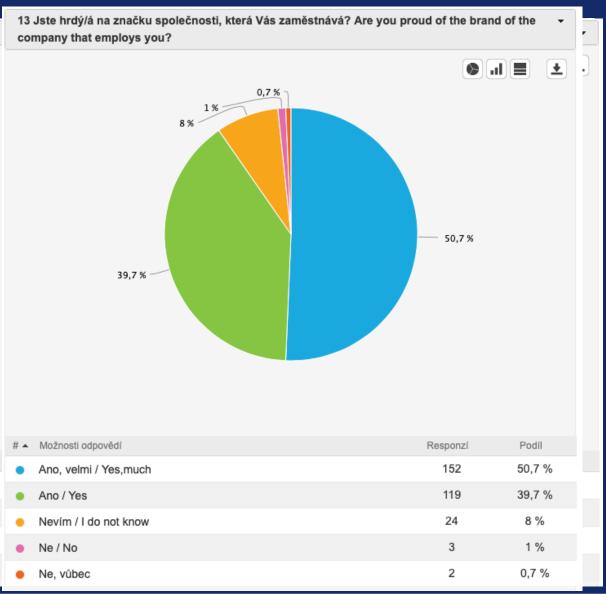
04.04.

05.04.

06.04.

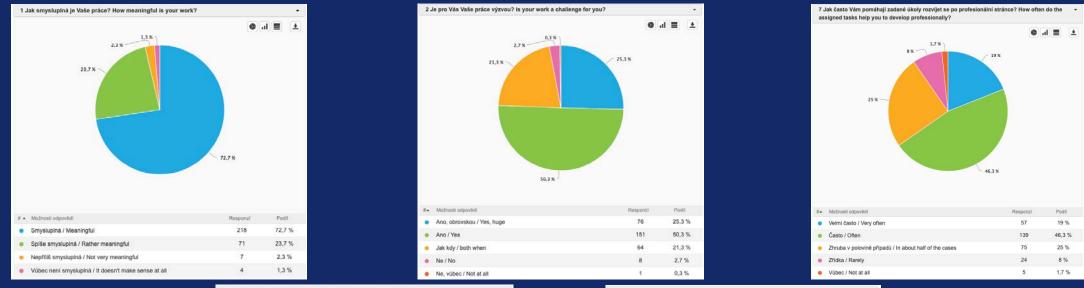
IOCB Prague

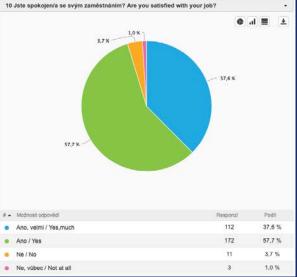
Survey on "Overall employee satisfaction in the organization IOCB CAS"



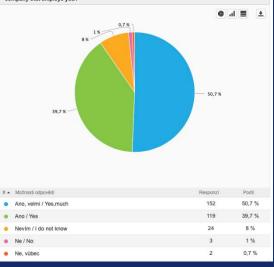
Slide number

Survey on "Overall employee satisfaction in the organization IOCB CAS" Slide number



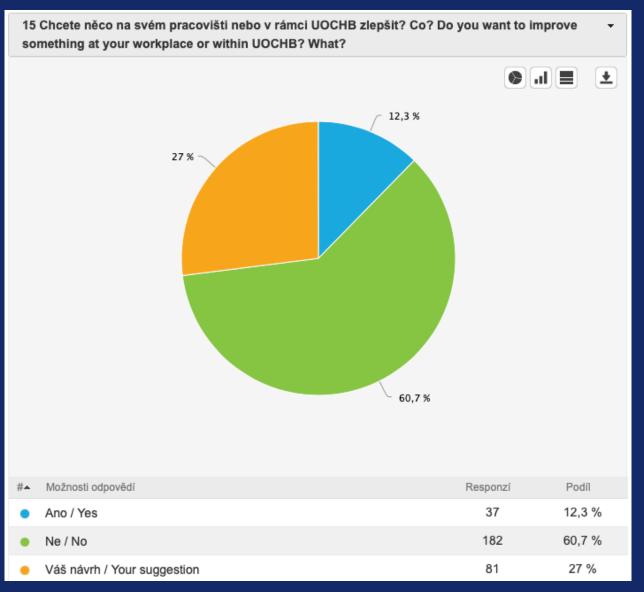


13 Jste hrdý/á na značku společnosti, která Vás zaměstnává? Are you proud of the brand of the company that employs you?



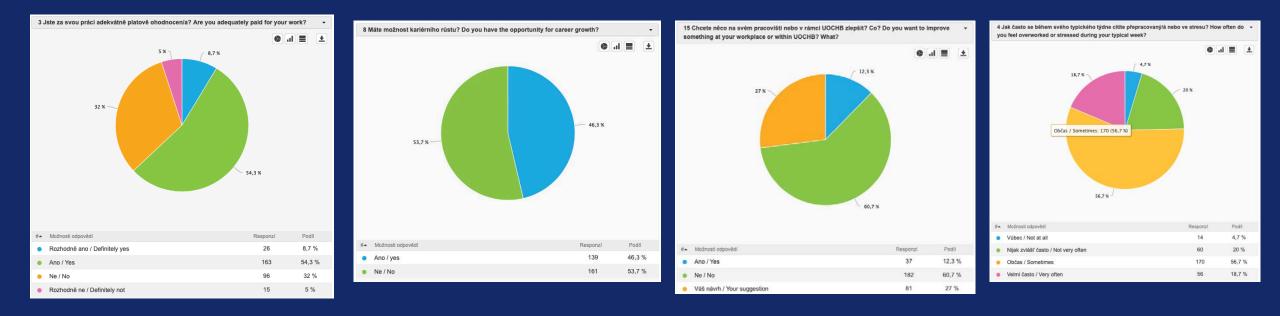
IOCB Prague

Survey on "Overall employee satisfaction in the organization IOCB CAS" Slide number



IOCB Prague

Survey on "Overall employee satisfaction in the organization IOCB AS Slide number CR"



Survey on "Overall employee satisfaction in the organization IOCB CAS"

Suggested issues for management

- relationships in the workplace,
- communication with management
- communication between groups
- overcrowding of the workplace in general
- communication of employment strategy
- cleaning and maintenance and its quality
- all the administration to online mode
- clear process settings
- solutions for rest, relaxation and dining areas

IOCB Repository – a suggestion

<u>A data repository</u> - a place that holds data, makes data available to use, and organizes data in a logical manner.

<u>A data repository</u> - an appropriate, subject-specific location where researchers can submit their data.

Data repositories - specific requirements concerning subject or research domain; data re-use and access;

file format and data structure; and the types of metadata that can be used.

Examples: ASEP, University of Hawai (<u>https://dspace.lib.hawaii.edu</u>), Ohio State University available for users – ZENODO, OSF, FigShare

Requirements for repositories: Persistent identifier, metadata, FAIR principles – findable, accessible, interoperable, reusable

IOCB Repository – a suggestion

IOCB Data to collect and store:

processed data, analyzed data

proceedings

lab notebooks in digital form

- experimental raw data,
- Data sets, Databases
- publications
- posters, konference

- documents (administrative of IOCB – director'a decrees, directives etc.)

Data policy and levels of access: - individual

- group (group leader)
- IOCB
- academy/industry
- Open Science

Requirements – persistent identifier (DOI,...), metadata structure, Data policy, FAIRness

IOCB fellowships for postdoctoral positions

The fellowship is granted for one year with possible extension by one more year Flexible start at IOCB

Recent successful applicants:

October 2020: Arun Dhillon in S. Zoll group; Denys Biriukov in H. Martinez-Seara's team (Jungwirth); Michal Gulka in P. Cígler group. April 2021: Tito Damiani in T. Pluskal group; Tomáš Hodík in T. Slanina group.

Recent change in rules:

Grantees of the IOCB fellowship are asked to submit **the first-year reports and requests for extension** at least a month before the end of the first year to the committee (<u>fellowship@uochb.cas.cz</u>). The committee will evaluate progress reports and extension plans individually and vote per rollam.

The final reports (from two years stay) consisting of either copies of their published papers during the fellowship or, if papers haven't been published during the period of the fellowship, must be submitted approximately one month after the end of the fellowship to the committee (fellowship@uochb.cas.cz).



Nomination to the Subsidiary Authorities (pomocné orgány) of the CAS

Eva Zažímalová | 19.04.2021

New composition of the Subsidiary Authorities of the Academic Council of the CAS

- following the Establishment of the new Academic Council of the CAS on April 6, 2021, also its subsidiary Authorities will be newly appointed for the 2021–2025 term
- you can nominate an employee who has already worked in this authority, as well as a new candidate
- you can nominate candidate from IOCB, as well as from other institutes of the CAS
- in some cases, we will also appreciate proposals for external candidates

Slide number

Subsidiary Authorities

- Economic Council of the CAS (M. Bilej)
 IOCB will nominate Mrs. Petschová
- Commission for **Energy** of the CAS (J. Plešek)
- Commission for Information Technologies of the CAS (J. Řídký)
- Commission for the **Environment** of the CAS (*Z. Havlas*)
- Council for **Space Activities** of the CAS (*J. Řídký*)
- Council for the Support of the Participation of the CAS in the European Integration of Research and Development (Š. Vajda)
- Council for Cooperation of the CAS with the **Business and Application Sphere** (J. Plešek)
- Council for Cooperation with Universities and Training of Researchers of the CAS
 (J. Vondráček) -it is possible to nominate candidates outside the CAS
- Council for the Use of **Intellectual Property** of the CAS (J. Řídký)
- Council for Foreign Relations of the CAS (D. Honys)

Slide number

Workgroup

Collegium of Popularizers and PR Workers (M. Pravdová)

- at least one nomination per each institute

Slide number

Due date

- until April 28, 2021

- Please, send your Nominations with giving the Reasons until 28th April to the <u>Secretariat</u>
 - do 28. dubna 2021
- The Secretariat then sends via a Mailbox

Eva Zažímalová 19.4.2021

Akademie věd ČR The Czech Academy of Science Thank you for your attention.



Miscellanea

Mtgs w GLs - 2021 Schedule



- January 22
- February 19
- March 26
- April 23
- May 14

- June 18
- September 10
- October 15
- November 12
- December 10

Always on Fridays at 10:00 am in the Director's Boardroom A4.01 (or via ZOOM)