# AIMMS publication report for: 2022-04-06

### New papers: 2022-3/4

van Schaick, G., Haselberg, R., Somsen, G. W., Wuhrer, M., Domínguez-Vega, E. **Studying protein structure and function by native separation–mass spectrometry** (Nature Reviews Chemistry, Mar 2022)[https://doi.org/10.1038/s41570-021-00353-7]

Iturbe-Espinoza, P., Bonte, M., Gundlach, E., Brandt, B. W., Braster, M., van Spanning, R. J. **Adaptive changes of sediment microbial communities associated with cleanup of oil spills in Nigerian mangrove forests** (Marine Pollution Bulletin, Mar 2022)[https://doi.org/10.1016/j.marpolbul.2022.113406]

Daas, T. J., Kooi, D. P., Grooteman, A. J., Seidl, M., Gori-Giorgi, P. **Gradient Expansions for the Large-Coupling Strength Limit of the Møller-Plesset Adiabatic Connection** (Journal of chemical theory and computation, 8 Mar 2022)[https://doi.org/10.1021/acs.jctc.1c01206]

Escher, S. E., Aguayo-Orozco, A., Benfenati, E., Bitsch, A., Braunbeck, T., Brotzmann, K., Bois, F., van der Burg, B., Castel, J., Exner, T., Gadaleta, D., Gardner, I., Goldmann, D., Hatley, O., Golbamaki, N., Graepel, R., Jennings, P., Limonciel, A., Long, A., Maclennan, R., Mombelli, E., Norinder, U., Jain, S., Capinha, L. S., Taboureau, O. T., Tolosa, L., Vrijenhoek, N. G., van Vugt-Lussenburg, B. M., Walker, P., van de Water, B., Wehr, M., White, A., Zdrazil, B., Fisher, C. **Integrate mechanistic evidence from new approach methodologies (NAMs) into a read-across assessment to characterise trends in shared mode of action** (Toxicology in Vitro, Mar 2022)[https://doi.org/10.1016/j.tiv.2021.105269]

Verweij, E. W., Bosma, R., Gao, M., van den Bor, J., Al Araaj, B., de Munnik, S. M., Ma, X., Leurs, R., Vischer, H. F. **BRET-Based Biosensors to Measure Agonist Efficacies in Histamine H1 Receptor-Mediated G Protein Activation, Signaling and Interactions with GRKs and β-Arrestins** (International Journal of Molecular Sciences, 1 Mar 2022)[https://doi.org/10.3390/ijms23063184]

Menzies, S. K., Clare, R. H., Xie, C., Westhorpe, A., Hall, S. R., Edge, R. J., Alsolaiss, J., Crittenden, E., Marriott, A. E., Harrison, R. A., Kool, J., Casewell, N. R. **In vitro and in vivo preclinical venom inhibition assays identify metalloproteinase inhibiting drugs as potential future treatments for snakebite envenoming by Dispholidus typus** (Toxicon: X, Jun 2022)[https://doi.org/10.1016/j.toxcx.2022.100118]

Belle, R., Kamps, J. J., Poater, J., Kumar, K., Pieters, B. J., Salah, E., Claridge, T. D., Paton, R. S., Bickelhaupt, F. M., Kawamura, A., Schofield, C. J., Mecinović, J. **Reading and erasing of the phosphonium analogue of trimethyllysine by epigenetic proteins** (Communications Chemistry, Dec 2022)[https://doi.org/10.1038/s42004-022-00640-4]

Brack, W., Barcelo Culleres, D., Boxall, A. B., Budzinski, H., Castiglioni, S., Covaci, A., Dulio, V., Escher, B. I., Fantke, P., Kandie, F., Fatta-Kassinos, D., Hernández, F. J., Hilscherová, K., Hollender, J., Hollert, H., Jahnke, A., Kasprzyk-Hordern, B., Khan, S. J., Kortenkamp, A., Kümmerer, K., Lalonde, B., Lamoree, M. H., Levi, Y., Lara Martín, P. A., Montagner, C. C., Mougin, C., Msagati, T., Oehlmann, J., Posthuma, L., Reid, M., Reinhard, M., Richardson, S. D., Rostkowski, P., Schymanski, E., Schneider, F., Slobodnik, J., Shibata, Y., Snyder, S. A., Fabriz Sodré, F., Teodorovic, I., Thomas, K. V., Umbuzeiro, G. A., Viet, P. H., Yew-Hoong, K. G., Zhang, X., Zuccato, E. **One planet: one health. A call to support the initiative on a global science–policy body on chemicals and waste** (Environmental Sciences Europe, Dec 2022)[https://doi.org/10.1186/s12302-022-00602-6]

Tebby, C., Gao, W., Delp, J., Carta, G., van der Stel, W., Leist, M., Jennings, P., van de Water, B., Bois, F. Y. **A quantitative AOP of mitochondrial toxicity based on data from three cell lines** (Toxicology in Vitro, Jun 2022)[https://doi.org/10.1016/j.tiv.2022.105345]

Jiang, L., Driedonks, T. A., Jong, W. S., Dhakal, S., Bart van den Berg van Saparoea, H., Sitaras, I., Zhou, R., Caputo, C., Littlefield, K., Lowman, M., Chen, M., Lima, G., Gololobova, O., Smith, B., Mahairaki, V., Riley Richardson, M., Mulka, K. R., Lane, A. P., Klein, S. L., Pekosz, A., Brayton, C., Mankowski, J. L., Luirink, J., Villano, J. S., Witwer, K. W. **A bacterial extracellular vesicle-based intranasal vaccine against SARS-Co** (Journal of Extracellular Vesicles, 14 Mar 2022)[https://doi.org/10.1002/jev2.12192]

Armada, D., Llompart, M., Celeiro, M., Garcia-Castro, P., Ratola, N., Dagnac, T., de Boer, J. **Global evaluation of the chemical hazard of recycled tire crumb rubber employed on worldwide synthetic turf football pitches** (Science of the Total Environment, 15 Mar 2022)[https://doi.org/10.1016/j.scitotenv.2021.152542]

Leslie, H. A., Van Velzen, M. J., Brandsma, S. H., Vethaak, A. D., Garcia-vallejo, J. J., Lamoree, M. H.Pages:107199 **Discovery and quantification of plastic particle pollution in human blood** (Environment International, 24 Mar 2022)[https://doi.org/10.1016/j.envint.2022.107199]

Kohler, I., Verhoeven, M., Haselberg, R., Gargano, A. F. **Hydrophilic interaction chromatography – mass spectrometry for metabolomics and proteomics: state-of-the-art and current trends** (Microchemical Journal, Apr 2022)[https://doi.org/10.1016/j.microc.2021.106986]

Wijtmans, M., Josimovic, I., Vischer, H. F., Leurs, R. **Optical control of Class A G protein-coupled receptors with photoswitchable ligands** (Current Opinion in Pharmacology, Apr 2022)[https://doi.org/10.1016/j.coph.2022.102192]

Kuschmierz, L., Shen, L., Bräsen, C., Snoep, J., Siebers, B. **Workflows for optimization of enzyme cascades and whole cell catalysis based on enzyme kinetic characterization and pathway modelling** (Current Opinion in Biotechnology, Apr 2022)[https://doi.org/10.1016/j.copbio.2021.10.020]