

Peer-reviewed publications of GESAMP Working Group 38

- 1) Okin, G., A. R. Baker, I. Tegen, N. M. Mahowald, F. J. Dentener, R. A. Duce, J. N. Galloway, K. Hunter, M. Kanakidou, N. Kubilay, J. M. Prospero, M. Sarin, V. Surapipith, M. Uematsu, T. Zhu, "Impacts of atmospheric nutrient deposition on marine productivity: roles of nitrogen, phosphorus, and iron", *Global Biogeochemical Cycles*, 25, GB2022, doi:10.1029/2010GB003858, (2011).
- 2) Hunter, K.A., P. S. Liss, V. Surapipith, F. Dentener, R. A. Duce, M. Kanakidou, N. Kubilay, N. Mahowald, G. Okin, M. Sarin, I. Tegen, M. Uematsu, and T. Zhu, "Impacts of anthropogenic SO_x, NO_x and NH₃ on acidification of coastal waters and shipping lanes", *Geophysical Research Letters*, 38, L13602, doi:10.1029/2011GL047720 (2011).
- 3) Kanakidou, M., R. Duce, J. Prospero, A. Baker, C. Benitez-Nelson F. J. Dentener, K.A. Hunter, N. Kubilay, P. S. Liss , N. Mahowald, G. Okin, M. Sarin, K. Tsigaridis, M. Uematsu, L.M. Zamora, and T. Zhu, "Atmospheric fluxes of organic N and P to the ocean", *Global Biogeochemical Cycles*, 26, GB3026,doi:10.1029/2011GB004277, (2012).
- 4) Schulz, M., J. M. Prospero, A. R. Baker, F. Dentener, L. Ickes, P. S. Liss, N. M. Mahowald, S. Nickovic, C. Pérez García-Pando, S. Rodríguez, M. Sarin, I. Tegen, R.A. Duce, "The atmospheric transport and deposition of mineral dust to the ocean -Implications for research needs", *Environmental Science and Technology*, 46, 10,390-10,404 (2012).
- 5) Hagens, M., K.A. Hunter, P.S. Liss, and J.L. Middelburg, "Biogeochemical context impacts seawater pH changes resulting from atmospheric sulfur and nitrogen deposition", *Geophysical Research Letters*, 41, doi:10.1002/2013GL058796 (2014).
- 6) Kim, T.-W., K.Lee, R. Duce, and P. Liss, "Impact of atmospheric nitrogen deposition on phytoplankton productivity in the South China Sea", *Geophysical Research Letters*, 41, 3156–3162, doi:10.1002/2014GL059665. (2014).
- 7) Somes, C.J., A. Landolphi, W. Koeve, and A. Oschlies, "Limited impact of atmospheric nitrogen deposition on marine productivity due to biogeochemical feedbacks in a global ocean model", *Geophysical Research Letters*, 43, 4500–4509, doi: 10.1002/2016GL068335. (2016).
- 8) Kanakidou, M., S. Myriokefalitakis, N. Daskalakas, G. Fanourgakis, A. Nenes, A.R. Baker, K. Tsigaridis, and N. Mihalopoulos, "Past, Present, and Future Atmospheric Nitrogen Deposition", *Journal of the Atmospheric Sciences*, 73, 2039-2047, doi:10.1175/JAS-D-15-0278.1 (2016)
- 9) Sharples, J., J. J. Middelburg, K. Fennel, and T. D. Jickells, "What proportion of riverine nutrients reaches the open ocean", *Global Biogeochemical Cycles*, 31, 39–58, doi:10.1002/2016GB005483. (2017).
- 10) Jickells, T.D., E. Buitenhuis, K. Altieri, A.R. Baker, et al., "A re-evaluation of the magnitude and impacts of anthropogenic atmospheric nitrogen inputs on the ocean", *Global Biogeochemical Cycles*, 31, 289–305, doi:10.1002/2016GB005586. (2017).

- 11) Baker, A.R., M. Kanakidou, K. E. Altieri, et al., "Observation-and model-based estimates of particulate dry nitrogen deposition to the oceans", Atmospheric Chemistry and Physics, 17, 81898210, <https://doi.org/10.5194/acp-17-8189.2017>. (2017).
- 12) Suntharalingam, P., L. M. Zamora, H.W. Bange, S. Bikkina, E. Buitenhuis, M. Kanakidou, J.-F. Lamarque, A. Landolfi, L. Resplandy, M. M. Sarin, S. Seitzinger and A. Singh, "Anthropogenic nitrogen inputs and impacts on oceanic N₂O fluxes in the northern Indian Ocean: the need for an integrated observation and modelling approach", Deep-Sea Research Part II: Topical Studies in Oceanography, 166, pgs 104-113
[https://doi.org/10.1016/j.dsrr.2019.03.007 \(2019\)](https://doi.org/10.1016/j.dsrr.2019.03.007).
- 13) Kim, J.-M, K. Lee, Y.-S. Suh, and I.S. Han, "Phytoplankton do not produce carbon-rich organic matter in high CO₂ oceans", Geophysical Research Letters, 45, 4189–4197. [https://doi.org/10.1029/2017GL075865 \(2018\)](https://doi.org/10.1029/2017GL075865).
- 14) Kanakidou, M., S. Myriokefalitakis, and K. Tsagaridis, "Aerosols in atmospheric chemistry and biogeochemical cycles of nutrients", Environmental Research Letters, 13. [https://doi.org/10.1088/1748-9326/aabcb \(2018\)](https://doi.org/10.1088/1748-9326/aabcb).
- 15) Myriokefalitakis, S., A. Ito, M. Kanakidou, A. Nenes, M. C. Krol, N. M. Mahowald, R. A. Scanza, D. S. Hamilton, M. S. Johnson, N. Meskhidze, J. F. Kok, C. Guieu, A. R. Baker, T. D. Jickells, M. Sarin, R. Shelley, A. Bowie, M. M. G. Perron, and R. A. Duce, "The GESAMP atmospheric iron deposition model intercomparison study", Biogeosciences, 15, 6659-6684. [https://doi.org/10.5194/bg-15-6659-2018 \(2018\)](https://doi.org/10.5194/bg-15-6659-2018).
- 16) Ito, A., S. Myriokefalitakis, M. Kanakidou, N.M. Mahowald, R.S. Scanza, D.S. Hamilton, A.R. Baker, T.D. Jickells, M. Sarin, S. Bikkina, Y. Gao, R.U. Shelley, C.S. Buck, W.M. Landing, A.R. Bowie, M.M.G. Perron, C. Guieu, N. Meskhidze, M.S. Johnson, Y. Feng, J.F. Kok, A. Nenes, and R.A. Duce, "Pyrogenic iron: The missing link to high iron solubility in aerosols", Science Advances, 5: eea7671 (2019).
- 17) Smith, S.R., G. Alory, A. Andersson, W. Asher, A. Baker, et al., "Ship-based contributions to global ocean, weather, and climate observing systems", Frontiers in Marine Science, 6, 434, 10.3389/fmars.2019.00434 (2019).
- 18) Liss, P.S., "Microplastics: All up in the air?", Marine Pollution Bulletin, 153, 110952 (2020)
- 19) Hopkins, F.E., P. Suntharalingam, M. Gehlen, O. Andrews, S.D. Archer, L. Bopp, E. Buitenhuis, I. Dadou, R.A. Duce, N. Goris, T.D. Jickells, M. Johnson, F. Keng, C.S. Law, K. Lee, P.S. Liss, M. Lizotte, G. Malin, C. Murrell, H. Naik, A. Rees, J. Schwinger, and P. Williamson, "The impacts of ocean acidification on marine trace gases and the implications for atmospheric chemistry and climate. Proceeding of the Royal Society A, 476: 20190769. [http://dx.doi.org/10.1098/rspa.2019.0769 \(2020\)](http://dx.doi.org/10.1098/rspa.2019.0769).
- 20) Baker, A.R., M. Kanakidou, A. Nenes, S. Myriokefalitakis, Croot, P.L., Duce, R.A., Gao, Y., Guieu, C., Ito, A., Jickells, T.D., Mahowald, N.M., Middag, R., Perron, M.M.G., Sarin, M.M., Shelley, R., Turner, D.R., "Changing atmospheric acidity as a modulator of nutrient deposition and ocean biogeochemistry", Science Advances, 7, eabd8800 (2021).

- 21) Allen, D., S. Allen, S. Abbasi, A. Baker, M. Bergmann, J. Brahney, J. Butler, R.A. Duce, S. Eckhardt, N. Evangelou, T. Jickells, M. Kanakidou, P. Kershaw, P. Laj , J. Levermore, D. Li, P.S. Liss, K. Liu, N. Mahowald, P. Masque, D. Materić, A.G.Mayes, P. McGinnity, I. Osvath, K.A. Prather, J.M. Prospero, L.E. Revell, S.G. Sander, W.J. Shim, J. Slade, A. Stein, O. Tarasova, and S. Wright, "Microplastics and nanoplastics in the marine-atmosphere environment", Nature Reviews, Earth and Environment,**3**, 393-405, <https://doi.org/10.1038/s43017-022-00292-x> (2022).