

REFERENCES

- 1.1 A. P. L. Knop, *Phenolic resins: chemistry, applications, and performance : future directions*; Springer-Verlag: Berlin, **1985**.
- 1.2 A. Gardziella, L.A. Pilato, A. Knop, *Phenolic resins: Chemistry, Applications, Standardization, Safety and Ecology*, Springer-Verlag, Berlin, **2000**.
- 1.3 C.P. Reghunadhan Nair, Prog. *Polym. Sci.* **2004**, 29, 401.
- 1.4 M. F. Grenier-Loustalot, S. Larroque, P. Grenier, D. Bedel, *Polymer*, **1996**, 37, 955.
- 1.5 R. T. Jones, *J Polym Sci Part A: Polym Chem* **1985**, 21, 1801.
- 1.6 Igor Shiklomanov's chapter "World fresh water resources" in Peter H. Gleick (editor), **1993**, *Water in Crisis: A Guide to the World's Fresh Water Resources*.
- 1.7 A.N. Soon, B.H. Hameed, *Desalination* **2011**, 269, 1.
- 1.8 R.M. Pink, Introduction, *Water Rights in Southeast Asia and India*, Springer, **2016**, pp. 1–14.
- 1.9 C. Su, M. Pukdee-Asa, C. Ratanatamskul, M.-C. Lu, *Desalination* **2011**, 278, 211–218.
- 1.10 S.D. Murty, S.D. Patel, R. Soni, N. Bhatt, *Int J Res Chem Environ.* **2012**, 2, 69.
- 1.11 D. Rawat, V. Mishra, R.S. Sharma, *Chemosphere* **2016**, 155, 591 - 605.
- 1.12 A. Baban, A. Yediler, D. Lienert, N. Kemerdere, A. Kettrup, *Dyes Pigments*, **2003**, 58, 93.
- 1.13 I.M.C. Goncalves, A. Gomes, R. Bras, M.I.A. Ferra, M.T.P. Amorin, R.S. Porter, *J Soc Dye Color* **2000**, 116, 393.
- 1.14 A. Ratna, B. Padhi, *Int J Environ Sci* **2012**, 3, 940.

- 1.15 J. E. Aguiar, J. C. A. De Oliveira, P. F. G. Silvino, J. A. Neto, I. J. Silva, S. M. P. Lucena, *Colloids Surf., A* **2016**, 496, 125.
- 1.16 K.T. Chung, G.E. Fulk, A.W. Andrews, *Appl Environ Microbiol* **1981**, 42, 641.
- 1.17 K.T. Chung, *Environ Carcino Ecotox Revs* **2000**, 18, 51.
- 1.18 A. Gottlieb, C. Shaw, A. Smith, A. Wheatley, S. Forsythe, *J Biotechnol* **2003**, 101, 49.
- 1.19 M.S. Tsuboy, J.P.F. Angeli, M.S. Mantovani, S. Knasmüller, G.A. Umbuzeiro, L.R. Ribeiro, *Toxicol in Vitro* **2007**, 21, 1650.
- 1.20 F.M.D. Chequer, T.M. Lizier, R. Felício, M.V.B. Zanoni, H.M. Debonsi, N.P. Lopes, R. Marcos, D.P. Oliveira, *Toxicol in Vitro* **2011**, 25, 2054.
- 1.21 B.J. Brüschweiler, C. Merlot, *Regul Toxicol Pharmacol* **2017**, 88, 214 and references therein.
- 1.22 T. Platzek, *Front. Biosci. E2*, **2010**, 1169–1183.
- 1.23 B. J. Brüschweiler, S. Küng, D. Bürgi, L. Mural, E. Nyfeler, *Regul Toxicol Pharmacol*, **2014**, 69, 263.
- 1.24 T.J. Haley, *Clin Toxicol*, **1975**, 8, 13.
- 1.25 H. S. Rai, M. S. Bhattacharyya, J. Singh, T. K. Bansal, P. Vats, U. C. Banerjee, *Crit. Rev. Environ. Sci. Tech.*, **2005**, 35, 219.
- 1.26 M.A. Brown, S.C. DeVito, *Crit Rev Env Sci Tech*, **1993**, 23, 249.
- 1.27 V.M. Arlt, H. Glatt, E. Muckel, U. Pabel, B.L. Sorg, H.H. Schmeiser, D.H. Phillips DH, *Carcinogenesis* **2002**, 23, 1937.
- 1.28 H.-G., Neumann, *Front. Biosci.* **2010**, 15, 1119.
- 1.29 P. Rajaguru, L.J. Fairbairn, J. Ashby, M. Willington, S. Turner, L. Woolford, N. Chinnasamy, J.A. Rafferty, *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, **1999**, 444, 175.
- 1.30 (European Commission), **2002**. Amending for the nineteenth time Council Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (azocolourants).

- 1.31 2008. Commission Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006.
- 1.32 V.K. Gupta, A. Nayak, S. Agarwal, I. Tyagi, J. *Colloids Surface Sci.*, **2014**, 417, 420.
- 1.33 K. Hanger: *Industrial dyes: Chemistry, Properties and Applications, Health and Safety Aspects. Germany: Wiley-VCH; 2003.*
- 1.34 M. R. Sohrabi, A. Khavaran, S. Shariati, S. Shariati, *Arabian J Chem*, **2017**, 10, S3523 and references therein.
- 1.35 S.F. Kang, C.H. Liao, S.T. Po, *Chemosphere*, **2000**. 41, 1287.
- 1.36 A. Safarzadeh-Amiri, J. R. Bolton, S.R. Cater, *Water Research*, **1997**, 31, 787.
- 1.37 I.A. Alaton, I.A. Balcioglu, D.W. Bahnemann, *Water Research*, **2002**. 36, 1143.
- 1.38 T. Robinson, G. McMullan, R. Marchant, *Bioresour Technol*, **2001**, 77, 247.
- 1.39 R.L. Singh, P.K. Singh, R.P. Singh, *International Biodeterioration & Biodegradation*, **2015**, 104, 21.
- 1.40 S. Sarkar, A. Banerjee, U. Halder, R. Biswas, R. Bandopadhyay, *Water Conserv Sci Eng*, **2017**, 2, 121.
- 1.41 H. Horitsu, M. Takada, E. Idaka, M. Tomoyeda, T. Ogawa, *Eur J Appl Microbiol*, **1977**, 4, 217.
- 1.42 M. Sudha, A. Saranya, G. Selvakumar, N. Sivakumar, *Int J Curr Microbiol App Sci*, **2014**, 3, 670.
- 1.43 A. Paszczynski, R.L. Crawford, *Biotechnology Progress*, **1995**, 11, 368.
- 1.44 I.M. Banat, P. Nigam, D. Singh, R. Marchant, *Bioresource Technology*, **1996**, 58, 217.

- 1.45 J.K. Polman, C.R. Breckenridge, *Textile Chemist and Colorist*, **1996**, 28, 31.
- 1.46 C. Y. Kuo, *J. Hazard. Mater.*, **2008**, 152, 949.
- 1.47 A.K. Verma, R.R. Dash, P. Bhunia, *J Environ Manage*, **2012**, 93, 154.
- 1.48 L.N. Ukiwe, S.I. Ibeneme, C.E. Duru, B.N. Okolue, G.O. Onyedika, C.A. Nweze, *Int. J. Res. Rev. Appl. Sci.*, **2014**, 18, 1.
- 1.49 C.-Z. Liang, S.-P. Sun, F.-Y. Li, Y.-K. Ong, T.-S. Chung, *Journal of Membrane Science*, **2014**, 469, 306.
- 1.50 A. Ahmad, S. Siti, C. Sing, K. Asma, A.W. Waseem, K. Rajeev, R. Mohd, *RSC Adv*, **2015**, 39, 1 and references therein.
- 1.51 M. Yusuf, F. M. Elfghi, S. A. Zaidi, E. C. Abdullah, M. A. Khan, *RSC Adv.*, **2015**, 5, 50392.
- 1.52 X. Zhang, C. Qin, Y. Gong, Y. Song, G. Zhang, R. Chen, Y. Gao, L. Xiao, S. Jia, *RSC Adv.*, **2019**, 9, 5313 and references therein.
- 1.53 Y.M. Slokar, A.M. Le Marechal, *Dyes and Pigments*, **1998**, 37, 335.
- 1.54 M.N.V.R. Kumar, T.R. Sridhari, K.D. Bhavani, P.K. Dutta, *Colourage*, **1998**, 45, 25.
- 1.55 T. Panswad, S. Wongchaisuwan, *Water Sci. Technol*, **1986**, 18, 139.
- 1.56 T. Robinson, G. McMullan, R. Marchant, P. Nigam, *Bioresource Technology*, **2001**, 77, 247.
- 1.57 K.C. Maheria, U.V. Chudasama, *Industrial & Engineering Chemistry Research*, **2007**, 46, 6852.
- 1.58 X. Song, Y. Wang, K. Wang, R. Xu, *Ind. Eng. Chem. Res.* **2012**, 51, 13438.
- 1.59 B. Pan, B. Pan, W. Zhang, L. Lv, Q. Zhang, S. Zheng, *Chem. Eng. J.* **2009**, 151, 19.
- 1.60 A. Yilmaz, E. Yilmaz, M. Yilmaz, R.A. Bartsch, *Dyes Pigments*, **2007**, 74, 54.
- 1.61 V.V. Panić, S.I. Šešlija, A.R. Nešić, S.J. Veličković, *Hem. ind.* **2013**, 67, 881 and references therein.

- 1.62 H. Gao, T. Kan, S. Zhao, Y. Qian, X. Cheng, W. Wu, X. Wang, L. Zheng, *J Hazard Mater*, **2013**, 261, 83.
- 1.63 S. S. Li, X. Z. Kong, X. B. Jiang, X. L. Zhu, *Chinese Chem Lett* **2013**, 24, 287.
- 1.64 Y.V. Shalaeva, J.E. Morozova, D.A. Mironova, E.K. Kazakova, M.T. Kadirov, I.R. Nizameev, A.I. Konovalov, *Supramol Chem* **2015**, 27, 595.
- 1.65 Y. Yildirim, H. Yilmaz, G. Ak, S. H. Sanlier, *Polímeros*, **2015**, 25, 137.
- 1.66 H. Ou, Q. You, J. Li, G. Liao, H. Xia, D. Wang, *RSC Adv.*, **2016**, 6, 98487.
- 1.67 G. Z. Kyzas, D. N. Bikiaris, A. C. Mitropoulos, *Polym Int* **2017**, 66, 1800.
- 1.68 M. Blachnio, T.M. Budnyak, A.D. Marczewska, A.W. Marczewski, V.A. Tertykh, *Langmuir* **2018**, 34, 2258.
- 1.69 J. A. Pellicer, M. I. R. López, M. I. Fortea, C. L. Abellán, M. T. M. Ros, S. L. Miranda, V. M. G. López, P. Semeraro, P. Cosma, P. Fini, E. Franco, M. Ferrándiz, E. Pérez, M. Ferrándiz, E. N. Delicado, J. A. Gabaldón, *Polymers*, **2019**, 11, 252.
- 1.70 W. Shao, X. Liu, H. Min, G. Dong, Q. Feng, S. Zuo, *ACS Appl. Mater. Interfaces*, **2015**, 7, 6966 and references therein.
- 1.71 R. Sugden, R. Kelly, S. Davies, *Nat Microbio*, **2016**, 1, 16187.
- 1.72 P. Li, J. Li, C. Wu, Q. Wu, J. Li, *Nanotechnology*, **2005**, 16, 1912.
- 1.73 H. Palza, *Int. J. Mol. Sci.* **2015**, 16, 2099 and references therein.
- 1.74 P. Gong, H. Li, X. He, K. Wang, J. Hu, W. Tan, S. Zhang, X. Yang, *Nanotechnology*, **2007**, 18, 604.
- 1.75 M. Rai, A. Yadav, A. Gade, *Biotechnol Adv.* **2009**, 27, 76.
- 1.76 Guoyhong Cao. *Nanostructures & Nanomaterials*. Imperial College Press, **2004**, ISBN: 1-86094-480-9.
- 1.77 Dieter Vollath. Wiley, *Nanomaterials*, **2008**, ISBN 978-3-527-31531-4

- 1.78 F. Gianluigi, F. Annarita, G. Stefania, P. Luciana, R. Mahendra, M. Giancarlo, G. Massimiliano, *Molecules*, **2015**, 20, 8856.
- 1.79 C. Dhand, N. Dwivedi, X. J. Loh, A. N. J. Ying, N. K. Verma, R. W. Beuerman, R. Lakshminarayanan, S. Ramakrishna, *RSC Adv.*, **2015**, 5, 105003 and references therein.
- 1.80 M. A. Garcia, *J. Phys D: Appl Phys*, **2011**, 44, 283001.
- 1.81 C. Noguez, *J. Phys. Chem. C*, **2007**, 111, 10, 3806.
- 1.82 A. Brandelli, A. C. Ritter, F. F. Veras, Metal Nanoparticles in Pharma, M. Rai, R. Shegokar (eds.), *Springer International Publishing AG* **2017**, pp.337-363 and references therein.
- 1.83 C. C. S. Batista, L. J. C. Albuquerque, I. de Araujo, B. L. Albuquerque, F. D. da Silva, F. C. Giacomelli, *RSC Adv*, **2018**, 8, 10873 and references therein.
- 1.84 S.H. Jeong, S.Y. Yeo, S.C. Yi, *J Mater Sci*, **2005**, 40, 5407.
- 1.85 C. Marambio-Jones, E.M.V. Hoek, *J Nanopart Res*, **2010**, 12, 1531 and references therein.
- 1.86 K. Chaloupka, Y. Malam, A.M. Seifalian, *Trends Biotechnol.* **2010**, 28, 580.
- 1.87 M. Rai, A. Yadav, A. Gade, *Biotechnol Adv.* **2009**, 27, 76.
- 1.88 A. R. Gliga, S. Skoglund, I. O. Wallinder, B. Fadeel, H. L. Karlsson, *Part. Fibre Toxicol.*, **2014**, 11, 11.
- 1.89 Z. Chen, P. Yang, Z. Yuan, J. Guo, *Sci. Rep.*, **2017**, 7, 1.
- 1.90 C. Beer, R. Foldbjerg, Y. Hayashi, D. S. Sutherland, H. Autrup, *Toxicol. Lett.*, **2012**, 208, 286.
- 1.91 N. Durán, M. Durán, M. B. de Jesus, A. B. Seabra, W. J. Fávaro, G. Nakazato, Nanomedicine: Nanotechnology, *Biology, and Medicine*, **2016**, 12, 789 and references therein.
- 1.92 C. C. S. Batista, L. J. C. Albuquerque, I. de Araujo, B. L. Albuquerque, F. D. da Silva, F. C. Giacomelli, *RSC Adv.*, **2018**, 8, 10873 and references therein.

- 1.93 A.K. Singh, M. Tripathi, O.N. Srivastava, R.K. Verma, *Chemistry Select* **2017**, 2, 7233.
- 1.94 S. W. Chook, C. H. Chia, S. Zakaria, H. M. Neoh, R. Jamal, *New J Chem* **2017**, 41, 5061.
- 1.95 S. Zhang, Y. Tang, B.A. Vlahovic, *Nanoscale Res Lett* **2016**, 11, 80 and references therein.
- 1.96 S. Bokern, Z. Fan, C. Mattheis, A. Greiner, S. Agarwal, *Macromolecules* **2011**, 44, 5036.
- 1.97 M. Kim, J.-W. Byun, D.-S. Shin, Y.-S Lee, *Mater Res Bull*, **2009**, 44, 334.
- 1.98 A. Melaiye, Z. H. Sun, K. Hindi, A. Milsted, D. Ely, D.H. Reneker, C.A. Tessier, W.J. Youngs, *J. Am. Chem. Soc.* **2005**, 127, 2285.
- 1.99 S. Porel, S. Singh, S. S. Harsha, D. N. Rao, T. P. Radhakrishnan, *Chem. Mater.* **2005**, 17, 9.
- 2.1 S. Ghosh, M. Acharyya, R. Manna, C.K. dey, *Bull. Chem. Soc. Jpn.* **2011**, 84, 349.
- 2.2 S. Ghosh, M. Acharyya, *RSC Adv.* **2016**, 6, 28781.
- 2.3 S. Ghosh, M. Acharyya, S.C. Manna, *American J Chemistry and Application*, **2018**, 5, 29.
- 2.4 P. Flory, *Principles of Polymer Chemistry*; Cornell University Press: New York, **1953**.
- 2.5 M. N. Zafar, Q. Dar, F. Nawaz, M. N. Zafar, M. Iqbal, M. F. Nazar, *J Mater Res Technol*, **2019**, 8, 713.
- 2.6 R. W. Sabnis, *Handbook of Biological Dyes and Stains: Synthesis and Industrial Applications*. John Wiley & Sons: **2010**.
- 2.7 X. Wu, D. Wu, and R. Fu, *J. Hazard. Mater.*, **2007**, 147, 1028.
- 2.8 C. Wang, S. Yang, H. Chen, H. He, and C. Sun, *Appl Surf Sci*, **2014**, 301, 329.

- 2.9 I.A.W. Tan, A.L. Ahmad, B.H. Hameed, *J. Hazard. Mater.*, **2008**, *154*, 337.
- 2.10 H. M. F. Freundlich, *J. Phys. Chem*, **1906**, *57*, 385.
- 2.11 S.J. Allen, G. Mckay, J.F. Porter, *J. Colloid Interface Sci.* **2004**, *280*, 322.
- 2.12 G.C. Panda, S.K. Das, A.K. Guha, *J. Hazard. Mater.*, **2009**, *164*, 374.
- 2.13 P. Baskaralingam, M. Pulikesi, D. Elango, V. Ramamurthi, S. Sivanesan; *J Hazard Mater*, **2006**, *128*, 138.
- 2.14 R.E. Treybal, *Mass Transfer Operations*, third ed., McGraw-Hill Companies, **1980**.
- 2.15 S. Goldberg, *Equations and models describing adsorption processes in soils*. Soil Science Society of America, 677 S. Segoe Road, Madison, WI 53711, USA. Chemical Processes in Soils. SSSA Book Series, No. 8, p. 489, **2005**.
- 2.16 L. Abramian, H. El-Rassy, *Chem. Eng. J.*, **2009**, *150*, 403.
- 2.17 M. Takahashi, K. Kobayashi, K. Takaoka, K. Tajima, *Bull. Chem. Soc. Jpn.*, **1998**, *71*, 1467.
- 2.18 D. Mahanta, G. Madras, S. Radhakrishnan, S. Patil, *J. Phys. Chem. B*, **2008**, *112*, 10153.
- 2.19 J. Tie, D. Chen, M. Zhao, X. Wang, S. Zhou, L. Peng, *J. Water Reuse and Desalination*, **2016**, *6*, 515.
- 2.20 S. Brunauer, P.H. Emmett, E. Teller, *J. Am. Chem Soc.* **1938**, *60*, 309.
- 2.21 B. Dobinson, W. Hoffmann, B.P. Stark, *The Determination of Epoxide Groups*, Oxford: Pergamon, **1969**.
- 2.22 P. Flory, J. Rehner, *J. Chem. Phys.* **1943**, *11*, 521.
- 2.23 P. Flory, *J. Chem. Phys.* **1950**, *18*, 108.
- 2.24 J. Crank, *The mathematics of diffusion*. 2nd ed. Oxford: Clarendon press; **1975**, 244.
- 2.25 N. A. Peppas, Y. Huang, M. Torres-Lugo, J.H. Ward, J. Zhang, *Annu Rev Biomed Eng* **2000**, *9*.

- 2.26 H. Omidian, S.A. Hashemi, F. Askari, S. Nafisi, *Iran J Polym Sci Tech*, **1994**, 3, 115.
- 2.27 M. Barlkanl, C. Hepburn, *Iran J Polym Sci Tech*, **1992**, 1, 1.
- 2.28 L. Yin, L. Fei, F. Cui, C. Tang, C. Yin, *Biomaterials*, **2007**, 28, 1258.
- 3.1 M. Blachnio, T.M. Budnyak, A.D. Marczevska, A.W. Marczewski, V.A. Tertykh, *Langmuir*, **2018**, 34, 2258.
- 3.2 C. P. Li, H. Zhou, S. Wang, H. H. Yuan, S.Z. Zhang, M. Du, *Chem. Commun*, **2017**, 53, 4767.
- 3.3 D. Yang, L. Qiu, Y. Yang, *J. Chem. Eng. Data*, **2016**, 61, 3933.
- 3.4 S. Ghosh, M. Acharyya, *Chem Rep*, **2019**, 1, 1 (DOI: 10.25082/CR.2019.02.001).
- 3.5 H.M.F. Freundlich HMF, *J. Phys. Chem*, **1906**, 57, 385.
- 3.6 G.C. Panda, S.K. Das, A.K. Guha, *J. Hazard. Mater.*, **2009**, 164, 374.
- 3.7 K.Y. Foo, B.H. Hameed, *Chem. Eng. J*, **2010**, 156, 2.
- 3.8 P. Xu, G.M. Zeng, D.L. Huang, Ch. L. Feng, *Sci. Tot. Environ*. **2012**, 424, 1.
- 3.9 D. Fu, P.G. Keech, X. Sun, J.C. Wren, *Phys. Chem. Chem. Phys*, **2011**, 23, 18523.
- 3.10 C.J. Mena-Duran, M.R.S. Kou, T. Lopez, J.A. Azamar-Barrios, D.H. Aguilar, M.I. Domínguez, J.A. Odriozola, P.Quintana, *Appl. Surf. Sci*, **2007**, 253, 5762.
- 3.11 A.B. Cundy, L. Hopkinson, R.L.D. Whitby, *Sci. Tot. Environ*, **2008**, 400, 42.
- 4.1 S. Brunauer, P.H. Emmett, E. Teller, *J. Am. Chem Soc.* **1938**, 60, 309.
- 4.2 H.M.F. Freundlich, *J. Phys. Chem.* **1906**, 57, 385.
- 4.3 M. Wawrzkievicz , *Environ. Technol.* **2011**, 32, 455.
- 4.4 S.W. Won, J. Mao, G. Sankar, H.C. Lee, Y.S. Yun, *J. Chem. Eng.*, **2016**, 33, 945.

- 4.5 Z. Wu, H. Joo, K. Lee, *Chem. Eng. J.* **2005**, *112*, 227.
- 4.6 L. Abramian, H. El-Rassy, *Chem. Eng. J.* **2009**, *150*: 403.
- 4.7 T.W. Seow, C.K. Lim, *Int. J. Appl. Eng. Res.* **2016**, *11*, 2675.
- 4.8 X.X. Yang, Y.H. Li, Q.J. Du, J.K. Sun, L. Chen, S. Hu, Z.H. Wang, Y.Z. Xia, L.H. Xia, *J. Colloid Interface Sci.* **2015**, *453*, 107.
- 4.9 Z. Wu Z, H. Joo, K. Lee, *Chem. Eng. J.* **2005**, *112*, 227.
- 4.10 R.E. Treybal, *Mass Transfer Operations*, 3rd ed. McGraw-Hill Companie; **1980**.
- 4.11 S. Goldberg, Equations and models describing adsorption processes in soils. Soil Science Society of America. In: *Chemical Processes in Soils*. SSSA Book Series, No. 8., 677 S. Segoe Road, Madison, WI 53711, USA; **2005**, p. 489–517.
- 4.12 A. Szygula, E. Guibal, M. Ruiz, A.M. Sastre, *Colloid Surface A* **2008**, *330*, 219.
- 4.13 Q. Baocheng, Z. Jiti, X. Xuemin, Z. Chunli, Z. Hongxia, Z. Xiaobai, *J Environ Sci* **2008**, *20*, 704.
- 4.14 S.D. Khattri, M.K. Singh, *J Hazard Mater* **2009**, *167*, 1089.
- 4.15 T. Cai, H.J. Li, R. Yang, Y.W. Wang, R.H. Li, H. Yang, A.M. Li, R.S. Cheng, *Cellulose* **2015**, *22*, 1439.
- 4.16 Y.V. Shalaeva, J.E. Morozova, D.A. Mironova, E.K. Kazakova, M.T. Kadirov, I.R. Nizameev, A.I. Konovalov, *Supramol Chem* **2015**, *27*, 595.
- 4.17 S. Chatterjee, S. Chatterjee, B.P. Chatterjee, A.K. Guha, *Colloids Surfaces A: Physicochem Eng Aspects* **2007**, *299*, 146.
- 4.18 A. Roy, S. Chakraborty, S.P. Kundu, B. Adhikari, S.B. Majumder, *Ind Eng Chem Res* **2012**, *51*, 12095.
- 4.19 G.M.D. Ferreira, G.M.D. Ferreira, M.C. Hespanhol, J.P. Rezende, A.C.S. Pires, L.V.A. Gurgel, L.H.M. da Silva, *Colloids Surfaces A* **2017**, *529*, 531.
- 4.20 Y. Su, Y. Jiao, C. Dou, R. Han, *Desalin Water Treat*, **2014**, *52*, 6145.
- 4.21 Y.J. Yao, B. He, F.F. Xu, X.F. Chen, *Chem Eng J*, **2011**, *170*, 82.

- 4.22 T. Xu, Y. He, Y. Qin, C. Zhao, C. Peng, J. Hu, H. Liu, *RSC Adv*, **2018**, 8, 4963.
- 4.23 X. Jin, B. Yu, Z. Chen, J.M. Arocena, R.W. Thring, *J Colloid Interface Sci*, **2014**, 435, 15.
- 5.1 S. Ghosh, M. Acharyya, S.M. Mandal. *Current Applied Polymer Science*. **2019**, 3, 1.
- 5.2 Jr M.J. Pelezar, E.C.S. Chen, R.D. Reid, *In: Microbiology*. New York: Tata McGraw Hill **1990**; P. 488.
- 5.3 S. Ghosh, *J Macromol Sci Part A – Pure and Applied Chemistry* **2005**, 42, 765.
- 5.4 S. Gurunathan, J.W. Han, D.N. Kwon, J.H. Kim, *Nanoscale Res Lett*, **2014**, 9, 1.
- 5.5 Clinical and Laboratory Standard Institute (CLSI), Performance Standards for Antimicrobial Susceptibility Testing; 20th Informational Supplement, CLSI document M100-S20-U, Clinical and Laboratory Standard Institute, P.A. Wayne, **2010**.
- 5.6 T. Samanta, G. Roymahapatra, W.F. Porto, S. Seth, S. Ghorai, S. Saha, J. Sengupta, O.L. Franco, J. Dinda, S.M. Mandal, *PLoS One*, **2013**, 8, e58346.
- 5.7 K. Sahu, H. Bansal, C. Mukherjee, M. Sharma, P.K. Gupta, *J Photochem Photobiol B* **2009**, 96, 9.
- 5.8 A.J. Haes, R.P. van Duyne, *J Am Chem Soc* **2002**, 124, 10596.
- 5.9 P. Raveendran, J. Fu, S.L. Wallen, *J Am Chem Soc* **2003**, 125, 13940.
- 5.10 B. Karthikeyan, *Physica B* **2005**, 364, 328.
- 5.11 J. Zheng, M.S. Stevenson, R.S. Hikida, P. Gregory Van Patten, *J Phys Chem B* **2002**, 106, 1252.
- 5.12 S. Gupta, P. Uhlmann, M. Agrawal, S. Chapuis, U. Oertel, M. Stamm, *Macromolecules* **2008**, 41, 2874.

- 5.13 J.R. Morones, J.L. Elechiguerra, A. Camacho, K. Holt, J.B. Kouri, J.T. Ramírez, M.J. Yacaman, *Nanotechnology* **2005**, *16*, 2346.
- 5.14 S. Agnihotri, S. Mukherji, S. Mukherji, *RSC Adv* **2014**, *4*, 3974.
- 5.15 R.K. Bera, S.M. Mandal, C.R. Raj, *Lett Appl Microbiol*, **2014**, *58*, 520.
- 5.16 A. Zille, M.M. Fernandes, A. Francesko, T. Tzanov, M. Fernandes, F.R. Oliveira, L. Almeida, T. Amorim, N. Carneiro, M.F. Esteves, A.P. Souto, *ACS Appl Mater Interfaces* **2015**, *7*, 13731.
- 5.17 M. Bernabo, A. Pucci, F. Galembeck, C.A. de Paula Leite, G. Ruggeri, *Macromol Mater Eng* **2009**, *294*, 256.
- 5.18 S. Shrivastava, T. Bera, A. Roy, G. Singh, P. Ramachandrarao, D. Dash, *Nanotechnology* **2007**, *18*, 103.
- 5.19 N. Duran, M. Duran, M.B. de Jesus, A.B. Seabra, W.J. Favaro, G. Nakazato, *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2016**, *12*, 789.
- 5.20 P. Dallas, V.K. Sharma, R. Zboril, *Adv Colloid Interface Sci*, **2011**; *166*, 119.
- 5.21 P.V. AshaRani, G.L.K. Mun, M.P. Hande, S. Valiyaveetil, *ACS Nano*, **2009**, *3*, 279.
- 5.22 Y. Matsumura, K. Yoshikata, S. Kunisaki, T. Tsuchido, *Appl Environ Microbiol*, **2003**, *69*, 4278.
- 5.23 A. Gupta, M. Maynes, S. Silver, *Appl Environ Microbiol*, **1998**, *64*, 5042.