DAFTAR PUSTAKA

Afiati, T.A., 2019, Sintesis Film PVA-Kitosan Terimobilisasi Dimetilglioksim untuk Deteksi Kolorimetri Ion Ni(II) dalam Air, Tesis, Departemen Kimia, Universitas Gadjah Mada, Yogyakarta.

Afrianita, R., Dewilda, Y., and Fitri, R., 2013, Efisiensi dan Kapasitas Penyerapan Fly Ash sebagai Adsorben dalam Penyisihan Logam Timbal (Pb) Limbah Cair Industri Percetakan di Kota Padang, *J. Tek. Lingkung. UNAD*, 10, 1–10.

Al-Khatib, M.F., Iyuke, S.E., Mohamad, A.B., Daud, W.R.W., Kadhum, A.A.H., Shariff, A.M., and Yarmo, M.A., 2002, The Effect of Impregnation of Activated Carbon with $SnCl_2.2H_2O$ on its Porosity, Surface Composition and CO Gas Adsorption, *Carbon N. Y.*, 40, 1929–1936.

Alonzo, G., Bertazzi, N., Ferraro, J.R., Furlani, A., Iucci, G., Polzonetti, G., and Russo, M. V., 1995, Mössbauer, Far-Infrared, and XPS Investigations of $SnCl_2$ and $SnCl_4$ Introduced in Polyconjugated Monosubstitued Acetylene Matrices, *Appl. Spectrosc.*, 49, 237–240.

Awual, M.R., Hasan, M.M., Islam, A., Asiri, A.M., and Rahman, M.M., 2019, Optimization of an Innovative Composited Material for Effective Monitoring and Removal of Cobalt(II) from Wastewater, *J. Mol. Liq.*, 298, 1–39.

Bai, X., Li, Y., Gu, H., and Hua, Z., 2015, Selective Colorimetric Sensing of Co^{2+} and Cu^{2+} using 1-(2-Pyridylazo)-2-Naphthol Derivative Immobilized Polyvinyl Alcohol Microspheres, *RSC Adv.*, 5, 77217–77226.

Balal, M., Yilmaz, E., and Soylak, M., 2016, Deep Eutectic Solvent Based Ultrasonic Assisted Liquid Phase Microextraction for the FAAS Determination of Cobalt, *J. Mol. Liq.*, 224, 538–543.

Baron, R.D., Pérez, L.L., Salcedo, J.M., Córdoba, L.P., and Sobral, P.J. do A., 2017, Production and Characterization of Films Based on Blends of Chitosan from Blue Crab (*Callinectes sapidus*) Waste and Pectin from Orange (*Citrus sinensis Osbeck*) Peel, *Int. J. Biol. Macromol.*, 98, 676–683.

Bernabé, P., Peniche, C., and Argüelles-Monal, W., 2005, Swelling Behavior Of Chitosan/Pectin Polyelectrolyte Complex Membranes. Effect of Thermal Cross-linking, *Polym. Bull.*, 55, 367–375.

Bi, H. and Han, X., 2019, *Chemical, Gas, and Biosensors for the Internet of Things and Related Applications*, 1st ed. Elsevier Inc.

Bigucci, F., Luppi, B., Cerchiara, T., Sorrenti, M., Bettinetti, G., Rodriguez, L., and Zecchi, V., 2008, Chitosan/Pectin Polyelectrolyte Complexes: Selection of Suitable Preparative Conditions for Colon-Specific Delivery of Vancomycin, *Eur. J. Pharm. Sci.*, 35, 435–441.

Cerutti, S., Moyano, S., Gásquez, J.A., Stripeikis, J., Olsina, R.A., and Martinez, L.D., 2003, On-line Preconcentration of Cobalt in Drinking Water Using a Minicolumn Packed with Activated Carbon Coupled to Electrothermal Atomic

Absorption Spectrometric Determination, *Spectrochim. Acta - Part B At. Spectrosc.*, 58, 2015–2021.

Chen, J. and Teo, K.C., 2001, Determination of Cadmium, Copper, Lead and Zinc in Water Samples by Flame Atomic Absorption Spectrometry after Cloud Point Extraction, *Anal. Chim. Acta*, 434, 325–330.

Chen, P.-H., Kuo, T.-Y., Kuo, J.-Y., Tseng, Y.-P., Wang, D.-M., Lai, J.-Y., and Hsieh, H.-J., 2010, Novel Chitosan-Pectin Composite Membranes with Enhanced Strength, Hydrophilicity and Controllable Disintegration, *Carbohydr. Polym.*, 82, 1236–1242.

Cheng, K.L. and Bray, R.H., 1955, 1-(2-Pyridylazo)-2-Naphthol as a Possible Analytical Reagent, *Anal. Chem.*, 27, 782–785.

Coo, L.D., Cardwell, T.J., Cattrall, R.W., and Kolev, S.D., 1998, Spectrophotometric Study of the Solubility and the Protolytic Properties Of 1-(2-Pyridylazo)-2-Naphthol in Different Ethanol-Water Solutions, *Anal. Chim. Acta*, 360, 153–159.

Dragan, E.S., Apopei Loghin, D.F., and Cocarta, A.I., 2014, Efficient sorption of Cu^{2+} by Composite Chelating Sorbents Based on Potato Starch-Graft-Polyamidoxime Embedded in Chitosan Beads, *ACS Appl. Mater. Interfaces*, 6, 16577–16592.

Effendy, 2013, *Perspektif Baru Kimia Koordinasi Jilid 1*, Edisi 2, Indonesian Academic Publishing, Malang.

El-Bahy, S.M. and El-Bahy, Z.M., 2016, Synthesis and Characterization of polyamidoxime Chelating Resin for Adsorption of Cu(II), Mn(II) and Ni(II) by Batch and Column Study, *J. Environ. Chem. Eng.*, 4, 276–286.

Eskandarpour, M., Jamshidi, P., Moghaddam, M.R., Ghasmei, J.B., and Shemirani, F., 2020, Developing a Highly Selective Method for Preconcentration and Determination of Cobalt in Water and Nut Samples using 1-(2-Pyridylazo)-2-Naphthol and UV–Visible Spectroscopy, *J. Sci. Food Agric.*, 100, 2272–2279.

Esmaeilzadeh, M., 2019, Ultrasound-Assisted Dispersive Magnetic Solid Phase Extraction Based on Metal-Organic Framework/1-(2-Pyridylazo)-2-Naphthol Modified Magnetite Nanoparticle Composites for Speciation Analysis of Inorganic Tin, *New J. Chem.*, 43, 4929–4936.

Ezati, M., Moinfar, S., Mohammadi, S., and Khayatian, G., 2021, A Continuous Sample Drop Flow-Based Microextraction Method for Spectrophotometric Determination of Cobalt with 1-(2-Pyridylazo)-2-Naphthol in Water Samples, *J. Anal. Chem.*, 76, 172–179.

Feng, Q., Wu, D., Zhao, Y., Wei, A., Wei, Q., and Fong, H., 2018, Electrospun AOPAN/RC Blend Nanofiber Membrane for Efficient Removal of Heavy Metal Ions from Water, *J. Hazard. Mater.*, 344, 819–828.

Fitri, D.W., 2016, Studi pelepasan asam tanat dari film kompleks polielektrolit kitosan/pektin, Tesis, Departemen Kimia, Universitas Gadjah Mada,

Yogyakarta.

Fouladian, H.R. and Behbahani, M., 2015, Solid Phase Extraction of Pb(II) and Cd(II) in Food, Soil, and Water Samples Based on 1-(2-Pyridylazo)-2-Naphthol-Functionalized Organic–Inorganic Mesoporous Material with the Aid of Experimental Design Methodology, *Food Anal. Methods*, 8, 982–993.

Gavrilenko, N.A. and Saranchina, N. V., 2009, Analytical properties of 1-(2-pyridylazo)-2-naphthol immobilized on a polymethacrylate matrix, *J. Anal. Chem.*, 64, 226–230.

Gavrilenko, N.A., Saranchina, N. V., and Gavrilenko, M.A., 2015, A Colorimetric Sensor Based on a Polymethacrylate Matrix with Immobilized 1-(2-Pyridylazo)-2-Naphthol for the Determination of Cobalt, *J. Anal. Chem.*, 70, 1475–1479.

Giokas, D.L., Paleologos, E.K., Prodromidis, M.I., Pappas, A.C., and Karayannis, M.I., 2002, Highly Selective Spectrophotometric Determination of Trace Cobalt and Development of a Reagentless Fiber-Optic Sensor, *Anal. Chim. Acta*, 467, 205–215.

Goldstein, G., Manning, D.L., and Menis, O., 1959, Spectrophotometric Determination of Cobalt with 1-(2-Pyridylazo)-2-Naphthol, *Anal. Chem.*, 31, 192–195.

González, A.G. and Herrador, M.Á., 2007, A Practical Guide to Analytical Method Validation, including Measurement Uncertainty and Accuracy Profiles, *TrAC - Trends Anal. Chem.*, 26, 227–238.

Gunawan, G., 2003, Studi Analisis Kobalt secara Kolorimetri dengan 1-Nitroso-2-Naftol, *J. Kim. Sains dan Apl.*, 6, 1–4.

Guo, Q., Teng, W., Ren, S., Rao, S., Wang, Y., Chen, L., Shen, B., and Takahashi, T., 2014, Efficient Synthesis of Tetrahydroquinolines from the Reaction of Aldehyde, Aniline, and Alkene under the In Situ Redox of $SnCl_2$ and $FeCl_3$, *J. Heterocycl. Chem.*, 51, 1100–1105.

Gupta, V.K., Shoora, S.K., Kumawat, L.K., and Jain, A.K., 2015, A highly selective colorimetric and turn-on fluorescent chemosensor based on 1-(2-pyridylazo)-2-naphthol for the detection of aluminium(III) ions, *Sensors Actuators, B Chem.*, 209, 15–24.

Harmita, 2004, Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya, *Maj. Ilmu Kefarmasian*, 1, 117–135.

Harris, D.C., 2010, *Quantitative Chemical Analysis*, 8th ed. Clancy Marshall, New York.

Harris, D.C. and Lucy, C.A., 2016, *Quantitative Chemical Analysis*, 9th ed. Kate Parker, New York.

Hoagland, P.D. and Parris, N., 1996, Chitosan/Pectin Laminated Films, *J. Agric. Food Chem.*, 44, 1915–1919.

Hu, N.L., Gao, H.W., Zhang, B., and Zhan, G.Q., 2005, Simultaneous Determination of Cobalt and Nickel in Wastewater with 2-Hydroxyl-5-Benzeneazoformoamithiozone by Spectral Correction Technique, *J. Chinese Chem. Soc.*, 52, 1145–1152.

Hulanicki, A., Glab, S., and Ingman, F., 1991, Chemical Sensors Definitions and Classification, *Pure Appl. Chem.*, 63, 1247–1250.

Hutapea, S.A., Saefumillah, A., and Asijati, E.W., 2020, Development of Cr(III) Analytical Method in Dairy Products by Cloud Point Extraction using Graphite Furnace Atomic Absorption Spectroscopy, *AIP Conf. Proc.*, 2242, 1–8.

Hutton, E.A., Van Elteren, J.T., Ogorevc, B., and Smyth, M.R., 2004, Validation of Bismuth Film Electrode for Determination of Cobalt and Cadmium in Soil Extracts using ICP-MS, *Talanta*, 63, 849–855.

Ihsan, T., Edwin, T., and Vitri, R.Y., 2017, Analisis LC50 Logam Pb , Co dan Cr terhadap Ikan Mas (Cyprinus carpio. L)pada Limbah Cair Industri Percetakan Kota Padang, *J. Tek. Lingkung. UNAND*, 14, 98–103.

Isogai, A. and Atalla, R.H., 1992, Preparation of Cellulose-Chitosan Polymer Blends, *Carbohydr. Polym.*, 19, 25–28.

Jahromi, M.R.F., Zandifar, S., Pakdaman, E., Tavakoli, F., and Bagheri, S., 2016, Determination of Ultra Trace Amount Chromium in Water Samples with the 1-(2-Pyridylazo)-2-Naphthol (PAN) by The Bromate Ion in Sulfuric Acid with Kinetic Spectrophotometric Method, *J. Phys. Theor. Chem.*, 12, 297–306.

Kamburov, M. and Lalov, I., 2012, Preparation of Chitosan Beads for Trypsin Immobilization, *Biotechnol. Biotechnol. Equip.*, 26, 156–163.

Kamran, M.A., Liu, R., Shi, L.J., Li, Z.A., Marzi, T., Schöppner, C., Farle, M., and Zou, B., 2014, Tunable Emission Properties by Ferromagnetic Coupling Mn(II) Aggregates in Mn-Doped CdS Microbelts/Nanowires, *Nanotechnology*, 25, 1–16.

Karim-Nezhad, G., Saghatforoush, L., Ershad, S., and Bahrami, K., 2008, Application of Multivariate Calibration Techniques to Simultaneous Spectrophotometric Determination of Copper and Iron using 1-(2-Pyridylazo)-2-Naphthol in AOT Micellar Solution, *Chinese J. Chem.*, 26, 952–956.

Knidri, H. El, Belaabed, R., Addaou, A., Laajeb, A., and Lahsini, A., 2018, Extraction, Chemical Modification and Characterization of Chitin and Chitosan, *Int. J. Biol. Macromol.*, 120, 1181–1189.

Kuswandi, B., 2008, *Sensor Kimia: Teori, Praktek & Aplikasi*, Bagian Kimia Farmasi PS Farmasi Universitas Jember, Jember.

Li, B., Wang, D., Lv, J., and Zhang, Z., 2006, Flow-Injection Chemiluminescence Simultaneous Determination of Cobalt(II) and Copper(II) using Partial Least Squares Calibration, *Talanta*, 69, 160–165.

Liew, S.Q., Chin, N.L., and Yusof, Y.A., 2014, Extraction and Characterization of Pectin from Passion Fruit Peels, *Agric. Agric. Sci. Procedia*, 2, 231–236.

Maciel, V.B. V., Yoshida, C.M.P., and Franco, T.T., 2015, Chitosan/Pectin Polyelectrolyte Complex as a pH Indicator, *Carbohydr. Polym.*, 132, 537–545.

Manzoori, J.L., Sorouradin, M.H., and Shabani, A.M.H., 1999, Atomic Absorption Determination of Cobalt After Preconcentration by 1-(2-Pyridylazo)-2-Naphthol Immobilized on Surfactant-Coated Alumina, *Microchem. J.*, 63, 295–301.

Martín-Cameán, A., Jos, A., Calleja, A., Gil, F., Iglesias-Linares, A., Solano, E., and Cameán, A.M., 2014, Development and Validation of an Inductively Coupled Plasma Mass Spectrometry (ICP-MS) Method for the Determination of cobalt, Chromium, Copper and Nickel in Oral Mucosa Cells, *Microchem. J.*, 114, 73–79.

Martins, J.G., de Oliveira, A.C., Garcia, P.S., Kipper, M.J., and Martins, A.F., 2018, Durable Pectin/Chitosan Membranes with Self-Assembling, Water Resistance and Enhanced Mechanical Properties, *Carbohydr. Polym.*, 188, 136–142.

Mauricio-Sánchez, R.A., Salazar, R., Luna-Bárcenas, J.G., and Mendoza-Galván, A., 2018, FTIR Spectroscopy Studies on the Spontaneous Neutralization of Chitosan Acetate Films by Moisture Conditioning, *Vib. Spectrosc.*, 94, 1–6.

McDonagh, C., Burke, C.S., and MacCraith, B.D., 2008, Optical Chemical Sensors, *Chem. Rev.*, 108, 400–422.

Meyer, D., Prien, R.D., Dellwig, O., Waniek, J.J., Schuffenhauer, I., Donath, J., Krüger, S., Pallentin, M., and Schulz-Bull, D.E., 2016, A Multi-Pumping Flow System for In Situ Measurements of Dissolved Manganese in Aquatic Systems, *Sensors (Switzerland)*, 16, 1–15.

Mirzaei, M., Behzadi, M., Abadi, N.M., and Beizaei, A., 2011, Simultaneous Separation/Preconcentration of Ultra Trace Heavy Metals in Industrial Wastewaters by Dispersive Liquid-Liquid Microextraction based on Solidification of Floating Organic Drop Prior to Determination by Graphite Furnace Atomic Absorption Spectra, *J. Hazard. Mater.*, 186, 1739–1743.

Moersilah, 2017, Pembuatan membran sensor Cd(II) dan Co(II) dengan ligan turunan naftol dalam matriks PMMA dan PVC, Disertasi, Departemen Kimia, Universitas Gadjah Mada, Yogyakarta.

Murthy, Y.L.N., Govindh, B., Diwakar, B.S., Nagalakshmi, K., and Singh, R., 2011, A Simple Inexpensive Detection Method of Nickel in Water using Optical Sensor, *Int. J. ChemTech Res.*, 3, 1285–1291.

Nambatingar, N., Clement, Y., Merle, A., Mahamat, T.N., and Lanteri, P., 2017, Heavy Metal Pollution of Chari River Water during the Crossing of N'Djamena (Chad), *Toxics*, 5, 1–12.

Ningrum, E.O., Ardiani, L., Rohmah, N.A., and Fajar, N., 2019, Modifikasi Biokomposit Kitosan dari Cangkang Rajungan (Portunus Pelagicus) dan

Pektin untuk Aplikasi Edible Film,. In, *Pengembangan Teknologi Kimia untuk Pengolahan Sumber Daya Alam Indonesia*. Yogyakarta, pp. 1–6.

Ohzeki, K., Toki, C., Ishida, R., and Saitoh, T., 1987, Determination of Trace Amounts of Cobalt(II) by Thin-Layer Spectrophotometry After Enrichment on a Membrane Filter as the PAN Complex, *Analyst*, 112, 1689–1695.

Paleologos, E.K., Prodromidis, M.I., Giokas, D.L., Pappas, A.C., and Karayannis, M.I., 2002, Highly selective spectrophotometric determination of trace cobalt and development of a reagentless fiber-optic sensor, *Anal. Chim. Acta*, 467, 205–215.

Panchagnula, S., 2016, Determination of Methyl Parabens- A Colorimetric Study, *Int. J. Trend Res. Dev.*, 3, 3–4.

Pandey, S., Mishra, A., Raval, P., Patel, H., Gupta, A., and Shah, D., 2013, A Highly Selective Colorimetric and Turn-On Fluorescent Chemosensor Based on 1-(2-Pyridylazo)-2-Naphthol for the Detection of Aluminium(III) Ions, *J. Young Pharm.*, 5, 160–166.

Pourret, O. and Faucon, M., 2018, Cobalt, *Encycl. Geochemistry*,.

Prabaharan, M., 2008, Review paper: Chitosan derivatives as promising materials for controlled drug delivery, *J. Biomater. Appl.*, 23, 5–36.

Ratnawati, E., Rahayu, S.P., Yunilawati, R., and Jati, B.N., 2011, Pengurangan Logam Berat pada Limbah Cair Industri Percetakan dengan Teknologi Biosorpsi, *J. Kim. dan Kemasan*, 33, 143.

Ravisankar, P., Naga Navya, C., Pravallika, D., and Sri, D.N., 2015, A Review on Step-By-Step Analytical Method Validation, *IOSR J. Pharm.*, 5, 7–19.

Safitri, E., Humaira, H., Murniana, M., Nazaruddin, N., Iqhrammullah, M., Sani, N.D.M., Esmaeili, C., Susilawati, S., Mahathir, M., and Nazaruddin, S.L., 2021, Optical pH sensor based on immobilization anthocyanin from *dioscorea alata L.* onto polyelectrolyte complex pectin–chitosan membrane for a determination method of salivary pH, *Polymers (Basel).*, 13, 1-12.

Salem, J.K. and Draz, M.A., 2020, Selective Colorimetric Nano-Sensing Solution for The Determination of Phosphate Ion in Drinking Water Samples, *Int. J. Environ. Anal. Chem.*, 1–10.

Sasongko, A., Yulianto, K., and Sarastri, D., 2017, Verifikasi Metode Penentuan Logam Kadmium (Cd) dalam Air Limbah Domestik dengan Metode Spektrofotometri Serapan Atom, *JST*, 6, 228.

Shokoufi, N. and Asbaghi, B.A.N., 2015, Rotative Liquid-Liquid Microextraction as a Preconcentration Method in Combination with Fiber Optic-Linear Array Detection Spectrophotometry for the Determination of Cobalt in Pharmaceutical Samples, *Sep. Sci. Technol.*, 50, 2327–2334.

Shukla, S.K., Mishra, A.K., Arotiba, O.A., and Mamba, B.B., 2013, Chitosan-based nanomaterials: A state-of-the-art review, *Int. J. Biol. Macromol.*, 59, 46–58.

Silvestre, A.L.P., Milani, M.I., Rossini, E.L., Pezza, L., and Pezza, H.R., 2018, A Paper Platform for Colorimetric Determination of Aluminum Hydrochloride in Antiperspirant Samples, *Spectrochim. Acta - Part A Mol. Biomol. Spectrosc.*, 204, 432–435.

Siswanta, D., Hasanah, F., Octaviani, H., and Mudasir, 2019, Chitosan-pectin-stearic acid film for controlled-release of curcumin, *Mater. Sci. Forum*, 948, 69–77.

Soylak, M., Elci, L., and Dogan, M., 1997, Determination of Trace Amounts of Cobalt in Natural Water Samples as 4-(2-Thiazolylazo) Recorcinol Complex after Adsorptive Preconcentration, *Anal. Lett.*, 30, 623–631.

Sukaryono, I.D., Hadinoto, S., and Fasa, L.R., 2017, Verifikasi Metode Pengujian Cemaran Logam pada Air Minum Dalam Kemasan (AMDK) dengan Metode AAS-GFA, *Maj. Biam*, 8–16.

Susanto, N.C.A., Mudasir, and Siswanta, D., 2020, Pembuatan dan Optimasi Sensor Warna Logam Besi Terlarut dalam Air dengan Matriks Karagenan, *J. Ilm. Tek. Kim.*, 4, 60–67.

Szabó, L., Herman, K., Mircescu, N.E., Fălămaş, A., Leopold, L.F., Leopold, N., Buzumurgă, C., and Chiş, V., 2012, SERS and DFT Investigation of 1-(2-Pyridylazo)-2-Naphthol and Its Metal Complexes with Al(III), Mn(II), Fe(III), Cu(II), Zn(II) and Pb(II), *Spectrochim. Acta - Part A Mol. Biomol. Spectrosc.*, 93, 266–273.

Tabesh, S., Davar, F., and Loghman-Estarki, M.R., 2018, Preparation of γ-Al_2O_3 Nanoparticles using Modified Sol-Gel Method and Its Use for The Adsorption of Lead and Cadmium Ions, *J. Alloys Compd.*, 730, 441–449.

Taguge, A., 2014, Studi Status Kandungan Logam Berat Timbal di Perairan Sekitar Pelabuhan Kota Gorontalo, *J. Ilm. Perikan. dan Kelaut.*, 2, 15–17.

Taher, M.A., Jarelnabbi, S.E., Al-Sehemi, A.G.M., El-Medani, S.M., and Ramadan, R.M., 2009, Synthesis and Spectroscopic Studies of Some New Metal Carbonyl Derivatives of 1-(2-Pyridylazo)-2-Naphthol, *J. Coord. Chem.*, 62, 1293–1301.

Tamiji, T. and Nezamzadeh-Ejhieh, A., 2019, Sensitive voltammetric Determination of Bromate by Using Ion-Exchange Property of a Sn(II)-Clinoptilolite-Modified Carbon Paste Electrode, *J. Solid State Electrochem.*, 23, 143–157.

Tsai, R.Y., Chen, P.W., Kuo, T.Y., Lin, C.M., Wang, D.M., Hsien, T.Y., and Hsieh, H.J., 2014, Chitosan/Pectin/Gum Arabic Polyelectrolyte Complex: Process-dependent Appearance, Microstructure Analysis and Its Application, *Carbohydr. Polym.*, 101, 752–759.

Ullah, M.R. and Haque, M.E., 2011, Spectrophotometric Determination of Toxic Elements (Cadmium) in Aqueous Media, *J. Chem. Eng.*, C, 1–12.

Veerasamy, R., Shalini, S., Sundram, K.M., and Rajak, H., 2010, Validation of

Analytical Methods - Strategies & Importance International Journal of Pharmacy and Pharmaceutical Sciences, *Int. J. Pharm. Pharm. Sci.*, 2, 18–22.

Wang, D., Luo, H.Q., and Li, N.B., 2005, Resonance Rayleigh Scattering Method for The Determination of Trace Amounts of Lead(II) with 1-(2-Pyridylazo)-2-Naphthol Dye, *Instrum. Sci. Technol.*, 33, 427–436.

Wang, Y., Ke, X., Zhou, X., Li, J., and Ma, J., 2016, Graphene for separation and preconcentration of trace amounts of cobalt in water samples prior to flame atomic absorption spectrometry, *J. Saudi Chem. Soc.*, 20, S145–S152.

Wencel, D., Abel, T., and McDonagh, C., 2014, Optical Chemical pH Sensors, *Anal. Chem.*, 86, 15–29.

Wong, W.W., Abbas, F.M.A., Liong, M.T., and Azhar, M.E., 2008, Modification of Durian Rind Pectin for Improved Biosorbent Ability, *Int. Food Res. J.*, 15, 363–365.