

## Referensi :

- Addo M.A., Darko E.O., Gordon C., Nyarko B. J. B., Gbadago J.K., Nyarko E., Affum H.A., and Botwe B.O., 2012, Evaluation of Heavy Metals Contamination of Soil and Vegetation in the Vicinity of a Cement Factory in the Volta Region, Ghana, *International Journal of Science and Technology*. 2 (1) : 40-50.
- Ahmed E., Ghada F. E., Azza K., Safaa R., 2016, Distribution and ecological risk assessment of some heavy metals in coastal surface sediments along the Red Sea, Egypt, *International Journal of Sediment Research* 31 (2016) 164–172
- Andriyani A., Ramelan A.H., dan Sutarno, 2010, Metode Geolistrik Imaging Konfigurasi Dipole-Dipole Digunakan Untuk Penelusuran Sistem Sungai Bawah Tanah Pada Kawasan Karst Di Pacitan, Jawa Timur, *Jurnal EKOSAINS*. 2 (1): 46-54.
- Badan Perencanaan Pembangunan Daerah dan Badan Pusat Statistik Provinsi Jawa Tengah, 2013, Semarang Dalam Angka 2012.
- Bohdan K ríbek, Vladimír Majer, Ilja Knesl, Josef Keder, Benjamin Mapani, Frederick Kamona, Martin Mihaljevi, Vojtech Ettler, Vít Pení zek, Ale s Vanek, & Ondra Sracek., 2015, Contamination of soil and grass in the Tsumeb smelter area, Namibia: Modeling of contaminants dispersion and ground geochemical Verification,
- Chi Peng, Meie Wang, Weiping Chen , 2016, Modelling cadmium contamination in paddy soils under long-term remediation measures: Model development and stochastic simulations.
- Dewi N.K, Purwanto and Henna R.S., 2014, Methallothionein pada Hati Ikan Sebagai Biomarker Pencemaran Kadmium (Cd) Diperairan Kaligarang Semarang, *Jurnal Manusia dan Lingkungan*. 21 (3) : 304-309.

- Estelle R., Valérie M., Bernard F., 2012, Adsorption of cadmium on different granulometric soil fractions: Influence of organic matter and temperature, *Journal Geoderma* 189-190 (2012) 133-143.
- Farid G., Sarwar N., Saifullah, Ahmad A., Ghafoor A., and Rehman M., 2014, Heavy Metals (Cd, Ni and Pb) Contamination of Soils, Plants and Waters in Madina Town of Faisalabad Metropolitan and Preparation of Gis Based Maps, *Advances in Crop Science and Technology*. 4 (1) : 1-7.
- Febrian N.F., Henna R .S., and Izzati M., 2013, Metode Pengolahan Effluent Limbah Sistem Vertical Dan Horizontal Sub Surface Flow Wetland Terhadap Pengurangan Nitrit Dan Amonia Di PT. Phapros Semarang, *Prosiding Seminar Nasional Pengelolaan Sumberdaya Alam dan Lingkungan* : 511-514
- Feng Ru, Aijing Yin, Jiaxin Jin, Xiuying Zhang, Xiaohui Yang, Ming Zhang &Chao Gao. ,2016, Prediction of cadmium enrichment in reclaimed coastal soils by classification and regression tree.
- Fitriyanto A.M, Heri Tjahjono, and Suhandini P, 2013, Evaluasi Penggunaan Lahan Terhadap Rencana Tata Ruang Wilayah Kota Semarang Tahun 2011 – 2031 (Untuk Kecamatan Genuk, Pedurungan, Dan Gayamsari) , *Geo Image* 2 (2).
- Galitskaya I.V., Mohan R., Krisna K., Batrak G.I., Eremina O.N., Putilina V.S., and Yuganova T.I., 2017, Assessment of Soil and Groundwater Contamination by Heavy Metals and Metalloids in Russian and Indian Megacities, *Procedia Earth And Planetary Science* 17 : 674-677.

Cornu J.Y., Schneider A, Jezequel K., and Denaix L., 2011, Modelling the complexation of Cd in soil solution at different temperatures using the UV-absorbance of dissolved organic matter.

Jiang X., Lu W.X., Zhao H.Q., Yang Q.C., and Yang Z.P., 2014, Potential Ecological Risk Assessment And Prediction of Soil Heavy-Metal Pollution Around Coal Gangue Dump, *Natural Hazards and Earth System Science.*, 14 : 1599-1610.

Jieying Huang, Zhenwei Wu, Liwei Chen, & Yubing Sun , 2015, The sorption of Cd(II) and U(VI) on sepiolite: A combined experimental and modeling studies.

Jino Son, Key-il Shin, & Kijong Cho , 2009, Response surface model for predicting chronic toxicity of cadmium to *Paronychiurus kimi* (Collembola), with a special emphasis on the importance of soil characteristics in the reproduction test.

K'Orowe, M.O, Nyadawa, M.O., Singh V.S., and Rangarajan, R., 2012, Geo-electrical resistivity and groundwater flow models for characterization of a hardrock aquifer system, *Global Advanced Research Journal of Physical and Applied Sciences (GARJPAS)*. 1(1) : 012-031.

Kubilay Güçlü & Resat Apak ,2000, Modeling of Copper (II), Cadmium (II), and Lead (II) Adsorption on Red Mud from Metal-EDTA Mixture Solutions.

Six L and Smolders E., 2014, Future trends in soil cadmium concentration under current cadmium,

Loke, M.H., Chambers, J.E., Rucker, D.F., Kuras, O., and Wilkinson, P.B., 2013, Recent Developments In The Direct-Current Geoelectrical Imaging Method, *Journal of Applied Geophysics*. 95 : 135-156.

- Salaudin A., Tandjung D, Bostang Radjagukguk B. and Narsito, 2010, Kajian Sebaran Kadmium Dalam Sayuran Dan Tanah Di Bantaran Sungai Cikarang Bekasi Laut (CBL), *Jurnal Tanah dan Lingkungan*, Vol. 12 No. 1, April 2010:1-8
- Luc T.C., Bonten, Joop G. Kroes., Piet Groenendijk., Bas van der Grift, 2012, Modeling diffusive Cd and Zn contaminant emissions from soils to surface waters, *Journal of Contaminant Hydrology* 138–139 (2012) 113–122
- Maldonado V.M., Rubio Arias H.O, Quintana R., Saucedo R.A., Gutierrez M., Ortega J. A. and Nevarez G.V., 2008, Heavy Metal Content in Soils under Different Wastewater Irrigation Patterns in Chihuahua, Mexico, *International Journal of Environmental Research and Public Health*. 5 (5) : 441-449.
- Margiotta S., and Negri S, 2008, Stratigraphic And Geophysical Integrated Methodologies For The Interpretation Of Sulphur Water Formational Environment In Salento (Italy), *International Journal of Coal Geology*. 75 : 27-39.
- Marlena B, Sasongko S.B and Sutrisnanto D., 2012, Kajian Pengelolaan Sub DAS Garang Hulu Terhadap Kualitas Air Sungai, *Prosiding Seminar Nasional Pengelolaan Sumberdaya Alam dan Lingkungan Semarang*, 11 September 2012 , hal. 23-29.
- Modrzewska B., and Wyszowski M., 2014, Trace metals content in soils along the state road 51 (northeastern Poland), *Environmental Monitoring and Assessment*. 186 : 2589-2597
- Nabeel F., Warnana D.D., and Bahri A.S, 2013, Analisa Sebaran Fosfat dengan Menggunakan Metode Geolistrik Konfigurasi Wenner-Schlumberger : Studi Kasus Saronggi, Madura, *Jurnal Sains Dan Seni Pomits*. 2 (1) : 2337-3520.
- Nadia Waegeneers, Ann Ruttens, & Ludwig De Temmerman , 2011, A dynamic model to calculate cadmium concentrations in bovine tissues from basic soil characteristics.

Nikolaos Sotiropoulos, Andreas Benardos, & Athanassios Mavrikos, 2016, Spatial modelling for the assessment of geotechnical parameters.

Ololade I.A., 2014, An Assessment of Heavy-Metal Contamination in Soils within Auto-Mechanic Workshops Using Enrichment and Contamination Factors with Geoaccumulation Indexes, *Journal of Environmental Protection*. 5 : 970-982.

Pemerintah Indonesia. 2009. *Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup*. Jakarta.

Pemerintah Indonesia. 2014. *Undang-Undang Republik Indonesia Nomor 101 Tahun 2014 Tentang Pengelolaan Limbah Bahan Berbahaya Dan Beracun*. Jakarta.

Peraturan Daerah Kota Semarang Nomor 14 Tahun 2011 Tentang Rencana Tata Ruang Wilayah Kota Semarang Tahun 2011 – 2031.

Peraturan Pemerintah Republik Indonesia Nomor 101 tahun 2014 tentang pengelolaan limbah bahan berbahaya dan beracun.

Peraturan Pemerintah Republik Indonesia No. 38 tahun 2011 tentang Sungai

Prapitari A., and Yulianto, T., 2013, Penggunaan Geolistrik Resistivitas 3-Dimensi Untuk Mengetahui Sebaran Limbah di TPA Jatibarang Kota Semarang, *Youngster Physics Journal*. 1 (4) : 59-70.

Purwanto., 2004, Permodelan Rekayasa Lingkungan. Semarang : Edisi 1. Program Studi Ilmu Lingkungan Program Pasca Sarjana Universitas Diponegoro.

Putranto T.T., Widiarso D.A., and Susanto N., 2016, Assessment of Groundwater Quality to Achieve Sustainable Development in Semarang Coastal Areas, *Procedia – Social and Behavioral Sciences*.

Rey J., Martínez J., Hidalgo M.C, and Rojas, D., 2013, Heavy Metal Pollution In The Quaternary Garza Basin: A Multidisciplinary Study Of The Environmental Risks Posed By Mining (Linares, Southern Spain), *Catena* 110 : 234–242.

Ruijuan Qu, Xinghao Wang, Zhengtao Liu, Zhenguang Yan, & Zunyao Wang ,2013, Development of a model to predict the effect of water chemistry on the acute toxicity of cadmium to *Photobacterium phosphoreum*.

Sasongko D.P., 2012, Model Persebaran Radionuklida Alam  $^{238}\text{U}$ ,  $^{232}\text{Th}$ ,  $^{226}\text{Ra}$ ,  $^{40}\text{K}$  Di Perairan Pesisir Semenanjung Muria [Disertasi]. Semarang (ID) : Program Doktor Manajemen Sumberdaya Pantai Program Pasca Sarjana Universitas Diponegoro.

Sasongko L.A., 2008, Pencemaran Air Sungai Tuk Akibat Air Limbah Domestic (Studi Kasus Kelurahan Bendan Ngisor Dan Kelurahan Sampangan Gajah Mungkur Kota Semarang), *Jurnal Momentum*. 4 (1) : 48-55.

Shanshan Cao, Anxiang Lu, Jihua Wang, & Lili Huo , 2016, Modeling and mapping of cadmium in soils based on qualitative and quantitative auxiliary variables in a cadmium contaminated are,.

Sharma P.V., 1997. *Enviromental And Engineering Geophysics*. United Kingdom : Cambridge University Press.

Song G Wen-en, Chen Shi-bao, Liu Ji-fang, Chen Li, Song Ning-ning, & Li Ning, Liu Bin ,2015, Variation of Cd concentration in various rice cultivars and derivation of cadmium toxicity thresholds for paddy soil by species-sensitivity distribution,

Stephan R. Rieder, Edward Tipping, Stefan Zimmermann, Elisabeth Graf-Pannatier, Peter Waldner, Markus Meili, & Beat Frey .,2014, Dynamic modelling of the long term behaviour of cadmium, lead and mercury in Swiss forest soils using CHUM-AM.,

- Sudaryanto and Wibawa Y.S., 2013, Sejarah Perkembangan Kota Semarang (Jawa Tengah) Di Masa Lalu Dan Dampak Kehadiran Polutan Nitrat Pada Air Tanah Di Masa Kini, *Jurnal Riset Geologi dan Pertambangan*. 23 (1) : 27-39.
- Supriyadi, Khumaedi, , Panca R.N., 2013, Pola Sebaran Limbah TPA Studi Kasus Di Jatibarang Semarang, *J. Manusia Dan Lingkungan*, Vol. 20, No.1, Maret. 2013: 49-56
- Susilo A, Sunaryo, and Wasis, 2013, Subsurface Structure Prediction Of Railroad Tunnel In Malang, Indonesia Based On Dipole-Dipole Geoelectrical Method, *Journal of Traffic and Logistics Engineering*. 1 (2) : 238-242.
- Sutanto, H., Nurhasanah, I., Hidayanto, E. and Wibowo, S. (2015), "Synthesis and Characterization of ZnO: TiO<sub>2</sub> Nano Composites Thin Films Deposited on Glass Substrate by Sol-Gel Spray Coating Technique", *AIP Conference Proceedings*. Vol. 1699. pp. 040005.
- Thanden, R. E., Sumadiredja, H., Richards, P. W, Sutisna, K., and Amin, T. C., 1996, Peta Geologi Lembar Magelang dan Semarang, Jawa, skala 1:100.000. Bandung: Pusat Penelitian dan Pengembangan Geologi.
- Van-Dycke S.A., and Menyeh A., 2013, Geo-Electrical Investigation Of Groundwater Resources And Aquifer Characteristics In Some Small Communities In The Gushiegu And Karaga Districts Of Northern Ghana, *International Journal Of Scientific & Technology Research*. 2 (3) : 25-35.
- Wang X., Wu M., Ma J., Chen X., and Hua L., 2016, Modeling of Acute Cadmium Toxicity in Solution To Barley Root Elongation Using Biotic Ligand Model Theory, *Journal of Environmental Science* 42 : 112-118.

- Wardhana D.D., Harjono H., dan Sudaryanto, 2014, Struktur Bawah Permukaan Kota Semarang Berdasarkan Data Gaya Berat, *Riset Geologi dan Pertambangan*. 24 : 53-64.
- Widianarko B., Verweij R.A., Van Gestel, C. A. M. and Van Straalen N. M., 2000, Spatial Distribution of Trace Metals in Sediments from Urban Streams of Semarang, Central Java, Indonesia, *Ecotoxicology and Environmental Safety* 46, 95-100.
- Wijatmoko B., and Hariadi., 2008, Studi Pola Sebaran dan Kedalaman Polusi Air Tanah Berdasarkan Nilai Resistivitas Disekitar Saluran Pembuangan Air Limbah Industri Rancaekek Kabupaten Bandung, *Jurnal Bionatura*. 10 (1) : 58-67.
- Windarto J., Pawitan H., Suripin., dan Januar J.P., 2008, Model Prediksi Tinggi Muka Air sungai Kaligarang Semarang dengan Jaringan Syaraf Tiruan, *Teknik* Vol 29 No.3 ISSN 0852-1697 page 189-195.
- Xuedong Wang, Mingyan Wu, Jingxing Ma, Xiaolin Chen, Luo Hua ,2016, Modeling of acute cadmium toxicity in solution to barley root elongation using biotic ligand model theory.
- Yulianti D.dan Sunardi, 2010, Identifikasi Pencemaran Logam Pada Sungai Kaligarang Dengan Metode Analisis Aktivasi Netron Cepat (AANC). 8 (1) : 34-45.
- Yuhu L., Hui L., Hailong Z., Wandong M.,Qian H., Xiaoping D.,Qinzhao X.,2015, Concentration distribution and potential health risk of heavy metals in *Macra veneriformis* from Bohai Bay, China., *Marine Pollution Bulletin* 97 (2015) 528–534.
- Zhiyuan L.,Zongwei M.,van der Kuijp T.,Zengwei Y.,Lei H., 2014, A review of soil heavy metal pollution from mines in China: Pollution and health risk assessment., *Science of the Total Environment* 468–469 (2014) 843–853