



## **Curriculum Vitae**

### **Dr. Md. Humayun Kabir**

Senior Scientific Officer,

Institute of National Analytical Research & Service (INARS)  
Bangladesh Council of Scientific and Industrial Research (BCSIR)

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### **CAREER OBJECTIVES**

Creative and technically experienced in chemistry, highly capable in food and environmental sample preparation (liquid-liquid extraction, and QuEChERS) for instrumental (HPLC and GC) analysis using traditional detector. Seeking post doctoral fellowship/research position/faculty position in relevant field.

### **EDUCATIONAL QUALIFICATION**

#### **► PhD in Agricultural Chemistry**

**CHONNAM NATIONAL UNIVERSITY, REPUBLIC OF KOREA**

From March 2014 to Feb 2018

#### **► Master of Science in Chemistry**

**UNIVERSITY OF DHAKA**

Dhaka, Bangladesh

Passing Year 2007 (Held in 2009)

#### **► Bachelor of Science in Chemistry (4-year integrated)**

**UNIVERSITY OF DHAKA**

Dhaka, Bangladesh

Passing Year 2006 (Held in 2008)

### **Job Experience**

- Position: Senior Scientific Officer  
Institute: Bangladesh Council of Scientific and Industrial Research (BCSIR)  
Duration: 28 Feb 2018 – Present
- Position: Scientific Officer  
Institute: Bangladesh Council of Scientific and Industrial Research (BCSIR)  
Duration: 20 Dec. 2009 – 27 Feb 2018

## **Training**

- An Advanced laboratory skill trainiong course. 11-21 Nov 2013. Zemianske, Kostolany, Slovakia.
- A workshop on the use, maintanance and trouble-shooting of common laboratory equipment, held from 07-12 July 2012, at Rajshahi BCSIR organized by NITUB. Bangladesh.
- In-house training on XRD, HPLC, FT-IR, GC arranged Bangladesh council of scientific and industrial research. Bangladesh.

## **Selected skills & techniques**

- Capable of operating and optimizing Gas chromatography with various detector (**GC-ECD, FPD, NPD, FID, MS and MS/MS**), High Performance Liquid Chromatography with various detector (**HPLC-UVD, DAD, FLD, and MS/MS**), Ultra Performance Liquid Chromatography coupled with different detector (**UPLC-DAD, MS/MS**).
- Able to operate and trouble shooting of X-ray diffratcometer (**XRD**), Atomic absorption spectrometer (**AAS**), Scanning electron microscope (**SEM**), **FT-IR**.
- Food, environmental sample preparing and clean up for instrumental analysis.
- Office management and team management capability
- Capable of project proposal writing, report preparing.

## **Computer Skills and competence**

- Microsoft word, Excel, Power point, Chem draw and Sigma plot.

## **Social skills and competences**

- Social, communicative and friendly with others.

## **Languages**

- Bengali (native), English (fluent) and Korean (moderate).

**Citizenship:** Bangladeshi

**Date of Birth:** 1984.01.01

## **Publications**

### ***a-First-author***

- Md. Humayun Kabir, A.M. Abd El-Aty, So Jeong Im, Md. Musfiqur Rahman, Sung-Woo Kim, Waziha Farha, Jeong-Heui Choi, Da-I Jung, Young-Jun Lee, Troung Lieu, Ho-Chul Shin, Geon-Jae Im, Su-Myeong Hong, Jae-Han Shim. (2016) Determination of residual levels of metrafenone in lettuce grown under greenhouse conditions using gas chromatography with a micro-electron capture detector. *The*

*Korean Society for Applied Biological Chemistry* (JKSABC). 59(1), 43-49. (SCIE,  
ISSN : 2468-0834)

- Md. Humayun Kabir, A. M. Abd El-Aty, Sung-Woo Kim, Han Sol Lee, Musfiqur Rahman, Young-Jun Lee, Hyung Suk Chung, Troung Lieu, Jeong-Heui Choi, Ho-Chul Shin, Geon-Jae Im, Su Myeong Hong, Jae-Han Shim. (2016) Residual determination and risk assessment of buprofezin in plum (*Prunus domestica*) grown in open-field conditions following the application of three different formulations. *Biomedical chromatography*. 30, 1721-1727. (SCI, ISSN : 0269-3879)
- Md. Humayun Kabir, A.M. Abd El-Aty, Md.Musfiqur Rahman, Sung Woo Kim, Jeong-Heui Choi, Young-Jun Lee, Lieu T.B. Truong, Kang Bong Lee, Mi-Ra Kim, Ho-Chul Shin, Jae-Han Shim (2017). The disappearance rate and risk assessment of thiacloprid residues in Asian pear using liquid chromatography confirmed with tandem mass spectrometry. *Biomedical chromatography*. 31, e3861. (SCI, ISSN : 0269-3879)
- Md. Humayun Kabir, A.M.Abd El-Aty, Sung-Woo Kim, Md.Musfiqur Rahman, Hyung Suk Chung, Han Sol Lee, Ho-Chul Shin, Jae Han Shim (2017). Decline pattern and risk assessment of cyenopyrafen in different varieties of Asian pear using liquid chromatography and tandem mass spectrometry. *Food Science and Biotechnology*, 26(2), 537-543. (SCIE, ISSN : 1226-7708)
- Md. Humayun Kabir, A.M. Abd El-Aty, Md.Musfiqur Rahman, HyungSuk chung, Han Sol Lee, Sun-Hyang Park, Fazil Hacumuftuoglu, Byung-Joon Chang, Ho-Chul Shin, Jae-Han Shim. (2017) Dissipation pattern and risk quotients assessment

of amisulbrom in Korean melon cultivated in plastic house conditions.

*Environmental Monitoring and Assessment.* 189:302. (SCIE, ISSN : 0167-6369)

- Md. Humayun Kabir, A.M. Abd El-Aty, Md. Musfiqur Rahman, Sung-Woo Kim, Han Sol Lee, Hyung Suk Chung, Jung Ah Do, Ji Hoon Jeong, Byung-Joon Chang, Moon Ik Chang, Ho-Chul Shin, Jae-Han Shim (2017). Dissipation kinetics, pre-harvest residue limits, and hazard quotient assessments of pesticides flubendiamide and fluopicolide in korean melon (*Cucumis melo* L. var. makuwa) grown under regulated conditions in plastic greenhouses. *Environ Sci Pollut Res* 24; 22241-22250. (SCI, ISSN 0944-1344)
- Md. Humayun Kabir, Md. Musfiqur Rahman, A.M. Abd El-Aty, Hyung Suk Chung, Han Sol Lee, Sun Hyang Park, Fazil Hacumifuioglu, Byung-joon Chang, Ho-Chul Shin, Jae-Han Shim (2017). Residue analysis of picoxystrobin in oriental melon using gas chromatographycoupled with electron capture detection and mass spectrometric confirmation: application to dissipation kinetics and risk assessment. *Food Science and Biotechnology*, 26(4), 1145-1153. (SCIE, ISSN : 1226-7708)
- Md. Humayun Kbir, A.M. Abd El-Aty, Md. Musfiqur Rahman, Hyung Suk Chang, Han Sol Lee, Mi-Ra Kim, Byung-Joon Chang, Jing Wang, Ho-Chul Shin, Jae-Han Shim (2017). Residual dynamic and risk assessment of dimethomorph in Swiss chard grown in two different sites. *Biomedical Chromatography*, DOI: 10.1002/bmc.4053. (SCI, ISSN : 0269-3879)
- Md. Humayun Kabir, A.M. Abd El-Aty, Md. Musfiqur Rahman, Hyung Suk Chung, Han Sol Lee, Sung Woo Kim, Hee-Ra Chang, Ho-Chul Shin, Sung Shik Shin, Jae-Han Shim (2017). Chromatographic determination, decline dynamic, and risk

assessment of sulfoxaflor in Asian pear and oriental melon. *Biomedical Chromatography*, DOI: 10.1002/bmc.4101 (SCI, ISSN : 0269-3879)

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- M. H. kabir, M.F. kabir, F. Nigar, Samina ahmed, A.I.Mustafa and M. Ahsan, Preparation and characterization of rice husk ash (RHA)TiO<sub>2</sub>/ZnO composites and its application in treating effluents from textiles industries, 47(4),445-448, BJSIR,2012.
- H. Kabir, F. Nigar , S. Ahmed, S. F. Kabir, A.I. Mustafa, M.Ahsan. Fluride doped bioceramic from egg shell: A promising biometarial for bone tissue engineering. Trends Biomater Artif Organs. 27 (4) 182-184(2013)

#### ***b-Co-author***

- Md. Musfiqur Rahman, Waziha Farha, A.M. Abd El-Aty, Md. Humayun Kabir, So jeong Im, Da-I Jung, Jeong-Heui Choi, Sung-Woo Kim, Young Wook Son, Cha-Hyeok Kwon, Ho-Chul Shin, Jae-Han Shim. (2015) Dynamic behavior and residual pattern of thiamethoxam and its metabolite clothianidin in Swiss chard using liquid chromatography-tandem mass spectrometry. *Food Chemistry*. 174 248-255 (SCI, ISSN : 0308-8146)

- Waziha Farha, Md. Musfiqur Rahman, A.M. Abd El-Aty, Da-I Jung, Md. Mumayun Kabir, Jeong-Heui Choi, Sung-Woo Kim, So Jeong Im, Young-Jun Lee, Ho-Chul Shin, Chan-Hyeok Kwon, Young-Wook Son, Kang-Bong Lee, Jae-Han Shim. (2015) A combination of solid-phase extraction and dispersive solid-phase extraction effectively reduces the matrix interference in liquid chromatography-ultraviolet detection during pyraclostrobin analysis in perilla leaves. *Biomedical Chromatography*. 29, 1932-1936. (SCI, ISSN : 0269-3879)
- Da-I Jung, Waziha Farha, A.M. Abd El-Aty, Sung-Woo Kim, Md. Musfiqur Rahman, Jeong-Heui Choi, Md. Humayun Kabir, So Jeong Im, Young-Jun Lee, Lieu. T.B. Truong, Ho-Chul Shin, Geon-Jae Im, Jae-Han Shim. (2016) Effect of light shading and climatic conditions on the metabolic behavior of flonicamid in red bell pepper. *Environmental Monitoring and Assessment*. 188, 144-152. (SCIE, ISSN : 0167-6369)
- Waziha Farha, Md. Musfiqur Rahman, A.M. Abd El-Aty, Sung-Woo Kim, Da-I Jung, So Jeong Im, Jeong-Heui Choi, Md. Humayun Kabir, Kang-Bong Lee, Ho-Chul Shin, Jae-Han Shim. (2016) Analysis of mandipropamid residual levels through systematic method optimization against the matrix complexity of sesame leaves using HPLC/UVD. *Biomedical Chromatography*. 30(7), 990-995. (SCI, ISSN : 0269-3879)
- So Jeong Im, Md. Musfiqur Rahman, A.M. Abd El-Aty, Sung-Woo Kim, Humayun Kabir, Waziha Farha, Truong Lieu, Young-Jun Lee, Da-I Jung, Jeong-Heui Choi, Ho-Chul Shin, Geon-Jae Im, Su-Myeong Hong, Jae-Han Shim. (2015) Simultaneous detection of fluquinconazole and flusilazole in lettuce using gas

chromatography with a nitrogen phosphorus detector: decline pattern at two different locations. *Biomedical Chromatography*. 30, 588-595. (SCI, ISSN : 0269-3879)

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- Hyung Suk Chung, A. M. Abd El-Aty, Sung-Woo Kim, Han Sol Lee,Md. Musfiqur Rahman, Md. Humayun Kabir, Ho-Chul Shin, Jae-Han Shim (2017) Simultaneous determination of sulfoxaflor and its metabolites,X11719474 and X11721061, in brown rice and rice straw after field application using LC-MS/MS. *International Journal of Environmental Analytical Chemistry*,97. 2, 99–111. (SCIE, ISSN: 0306-7319)
- Sung-Woo Kim, Md. Musfiqur Rahman, A.M. Abd el-Aty, Md. Humayun Kabir, Tae Woong Na, Jeong-Heui Choi, Ho-Chul Shin, Jae-Han Shim (2017) Simultaneous detection of sulfoxaflor and its metabolites, X11719474 and X11721061, in lettuce using a modified QuEChERS extraction method and liquid chromatography-tandem mass spectrometry: Residue analysis of sulfoxaflor and its metabolites in lettuce. *Biomedical Chromatography*. e3885. (SCI, ISSN : 0269-3879)

- Han Sol Lee, Sung-Woo Kim, A.M. Abd El-Aty, Hyung Suk Chung, Md. Humayun Kabir, Md. Musfiqur Rahman, Ji Hoon Jeong, Byung-Joon Chang, Ho-Chul Shin, Jae-Han Shim (2017) Liquid chromatography–tandem mass spectrometry quantification of acetamiprid and thiacloprid residues in butterbur grown under regulated conditions. *Journal of Chromatography B.* 1056. 172-177. (SCI, ISSN : 1570-0232)
- Md. Musfiqur Rahman, A. M. Abd El-Aty, Tae-Woong Na, Joon-Seong Park, Md. Humayun Kabir, Hyung Suk Chung, Han Sol Lee, Ho-Chul Shin, Jae-Han Shim. (2017) Simultaneous quantification of methiocarb and its metabolites, methiocarb sulfoxide and methiocarb sulfone, in five food products of animal origin using tandem mass spectrometry. *Journal of Chromatography B.* 1060. 387-394. (SCI, ISSN : 1570-0232)
- Hyung Suk Chung , Young-Jun Lee , Md. Mufiqur Rahman , A.M. Abd El-Aty, Han Sol Lee ,Md. Humayun Kabir, SungWoo Kim, Byung-Jun Park, Jang-EokKim, Fazil Hacımüftüoğlu , Nilufar Nahar, Ho-Chul Shin , Jae-Han Shim (2017) Uptake of the veterinary antibiotics chlortetracycline, enrofloxacin, and sulphathiazole from soil by radish. *Science of the Total Environment.* 605–606, 322–331 (SCI,ISSN: 0048-9697)
- Md. Musfiqur Rahman, A. M. Abd El-Aty, Md Humayun Kabir, Hyung Suk Chang, Han Sol Lee, Fazil Hacmuftuoglu, Ji Hoon Jeong, Byung-Joon Chang, Ho-Chul Shin, Jae-Han Shim. (2018). A quic and effective methodology for analyzing dinotefuran and its highly polar metabolites in plum using liquid chromatography-

tandem mass spectrometry. *Food Chemistry*. 239. 1235-1243. (SCI, ISSN : 0308-8146)

- Hyung Suk Chung, Md. Humayun Kabir, A.M. Abd El-Aty, Han Sol Lee, Md. Musfiqur Rahman, Byung-Joon Chang, Ho-Chul Shin, Jae-Han Shim (2017) Dissipation kinetics and pre-harvest residue limit of pyriofenone in oriental melon (*Cucumis melo* Var. makuwa) grown under regulated climatic conditions. *Biomedical Chromatography*. e3965. (SCI, ISSN : 0269-3879)
- Hyung Suk Chung, Young Jun Lee, Han Sol Lee, Md. Musfiqur Rahman, Md. Humayun Kabir, Byung-Jun Park, Jang-Eok Kim, Jae Han Shim (2017). Development of simultaneous analytical method of veterinary antibiotics in manure using liquid chromatography coupled with tandem mass spectrometry. *Korean Journal of Environmental Agriculture*. 36(3), 201-210. (SClx. ISSN 1225-3537 )
- In Kyung Kim, Sung-Woo Kim, A.M.Abd El-Aty, Md Musfiqur Rahman, Md.Humayun Kabir, Han Sol Lee, hyung Suk Chung, Ji Hoon Jeong, Ho-Chul Shin, Jae-Han Shim (2017). Decline patterns and risk assessment of 10 multi-class pesticides in young sprout amaranth (*Amaranthus mangostanus*) under greenhouse growing conditions. *Environ Sci Pollut Res*. DOI 10.1007/s11356-017-0135-7
- Waziha Farha, A.M.Abd El-Aty, Md Musfiqur Rahman, Md. Humayun Kabir, Hyung Suk Chung, Han Sol Lee, Jong-Sup Jeon, Jing Wang, Byung-Joon Chang, Ho-Chul Shin, Jae-Han Shim (2017) Dynamic residual pattern of azoxystrobin in Swiss chard with contribution to safety evaluation. *Biomedical Chromatography*. DOI: 10.1002/bmc.4092. (SCI, ISSN : 0269-3879)

- Samina Ahmed, Md. Humayun Kabir, Farah Nigar, Sumaya.F Kabir, Ahmed I. Mustafa, and Mainul Ahsan. Structural characterization of pure and doped calcium phosphate bioceramics prepared by simple solid state method. Science Vision (a scientific journal of COMSATS), vol. 16 and vol.17.
- Samina Ahmed, Shirin A. Jahan, Mainul Ahsan, Zenefar Yeasmin, Moniruz Zaman and Humayun Kabir, Semiconductor Photo-catalysis Towards a Clean Environment: Treatment of Dye Pollutants using rice husk ash (RHA)-TiO<sub>2</sub> composite plate, Proceedings of the Bangladesh Chemical Congress 2008, 287-294, published in 2010.
- Shirin A. Jahan, Shahnaj Parveen, Samina Ahmed, Humayun Kabir, Development and characterization of organophilic clay from bentonite, *Materials Science: An Indian Journal*, 8(2),67-72, 2012.

#### *c-Book chapter*

- Abul Khair, Gulam M. GulzarHossain, Mohammad S. Alam, Mohammad M.Hossain, Mohammad H. Kabir, Mohammad H. Rahman and Amal Halder. Novel Liquid Diffusion Tube Determines Electrolytes Relative Free Diffusion Velocities,Hydration Numbers and Overwhelmingly Revalidates Electrolytic Diffusion Law. <http://www.springer.com/chemistry/book/978-90-481-8649-5>

#### *d- Conferernce paper*

- Md. Humayun Kabir, Md. Musfiqur Rahman, A. M. Abd El-Aty, Hyung Suk Chung, Han Sol Lee, Jae-Han Shim. Residual analysis of amisulbrom in oriental melon (*Cucumis melo L.*, var makuwa) cultivated in plastic house conditions:

Dissipation kinetics, pre-harvest residue limits, and risk quotients assessments. 4<sup>th</sup> World congress on Chromatography. August 07-09, 2017. Rome. Italy

- Md. Humayun Kabir, Md. Musfiqur Rahman, A. M. Abd El-Aty, Hyung Suk Chung, Han Sol Lee, Jae-Han Shim. Residue analysis of picoxystrobin in oriental melon (*Cucumis melo L. var. makuwa*) using gas chromatography coupled with electron capture detection and mass confirmation - apply to dissipation kinetics, PHRL and risk assessment. 2017 International Symposium and Annual Meeting of the KSPS, MVL Hotel, Yeosu, Republic of Korea, April 6-7, 2017.
- Md. Humayun Kabir, A. M. Abd El-Aty, Md. Musfiqur Rahman, Sung-Woo Kim, Han Sol Lee, Hyung Sik Chung, and Jae-Han Shim. Dissipation Kinetics, Pre-Harvest Residue Limits, and Hazard Quotients Assessment of Flubendiamide and Fluopicolide in Oriental Melon (*Cucumis melo L. var. makuwa*) Grown Under Plastic House Regulated Conditions. The 5<sup>th</sup> International Symposium on Environmental Analytical Chemistry (ISEAC 5-Asia), Ho Chi Minh City, Vietnam, May 17-20, 2017,
- Md. Humayun Kabir, Da-I Jung, So Jeong Im, Waziha Farha, Sung-Woo Kim, Md. Musfiqur Rahman, Jeong-Heui Choi, A. M. Abd El-Aty, Jae-Han Shim. Establishment of pre-harvest residue limit of amisulbrom and cyantraniliprole in shallot grown under greenhouse condition using LC-UVD. The 45<sup>th</sup> World Chemistry Congress, IUPAC-2015, Busan, Republic of Korea, August 9-14, 2015.
- Md. Humayun Kabir, Md. Musfiqur Rahman, Sung-Woo Kim, Jeong-Heui Choi, Young-Jun Lee, Jae-Han Shim. Thiacloprid decline pattern and risk assessment

studies on Asian pear. The Korean Society for Applied Biological Chemistry,16-18 June 2016, Jejeu, South Korea.

- Md. Humayun Kabir, Im So Jeong, Md. Musfiqur Rahman, Sung-Woo kim, Jeong-Heui Choi, A.M. Abd El-Aty, Da-I Jung, Young-Jun Lee, Troung Thi Bich Lieu, Jae-Han Shim. Studies on Dissipation Pattern of Cyenopyrafen in Pear Using Liquid Chromatography-Ultraviolet Detector (LC-UVD). International Conference on Biological Engineering and Natural Sciences. 5-8 Januaryu. 2016. Cebu. Philipines
- Md. Huamayun Kabir, Im So Jeong, Md. Musfiqur Rahman, Sung-Woo kim, Jeong-Heui Choi, A.M. Abd El-Aty, Waziha Farha, Da-I Jung, Young-Jun Lee, Troung Thi Bich Lieu, Jae-Han Shim. Studies on Dissipation Pattern of Metrafenone in Lettuce using Gas Chromatography-Electron Capture Detector. 10-12 August, 2015, Applied biological chemistry conference. South Korea.
- Md. Humayun Kabir, Im So Jeong, Md. Musfiqur Rahman, Sung-Woo kim, Jeong-Heui Choi, A.M. Abd El-Aty, Da-I Jung, Young-Jun Lee, Jae-Han Shim. Determination of Acetamiprid in Chard Using HPLC-UVD; Application to Dissipation Pattern. 20-22 July 2014, Applied biological chemistry conference. South Korea.

### **Patent and processed development**

#### ***a- Patent***

- Preparation of anionic surfactant treated bentonite as adsorbent for water treatment.

*b- Process development*

- Preparation of calcium hydroxyapatite bio-ceramic material from egg shell.
- Preparation of fluoroapatite from egg shell

**References**

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<b>Dr. Samina Ahmed</b> <b>Director (in-charge)</b> Institute of Glass and Ceramic Research and Testing (IGCRT) Bangladesh Council of Scientific and Industrial Research (BCSIR) Tel, +8801817549816 <a href="mailto:saminaahmed@bcsir.gov.bd">saminaahmed@bcsir.gov.bd</a>	