

Fiche analytique – Mémoire de Master MUSE

A rendre au secrétariat lors de l'inscription à la soutenance du mémoire

* champs obligatoires

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TITRE MEMOIRE*	Microplastic Abundance in Coastal Marine Environments of Hong Kong			
NUMERO MEMOIRE	240			
DATE SOUTENANCE	13.10.2016	Salle: B2B	Heure: 16 :30	
THEMATIQUE* (AFFILIATION)	Sciences de l'eau			
VOLEE MUSE*	2013			
TITRE ACADEMIQUE* (par ex.: licencié en biologie)	Licenciée en Relations Internationales et Sciences Politiques			
DIRECTION* / EVALUATION	Directeur de mémoire* Dr. Professeur Serge Stoll	Co-directeur de mémoire* NA	Nom(s) du ou des juré(s)* - Dr. F. Cornal - Dr. O. Orickhova	
STAGE (éventuel)	Organisme d'accueil NA	Maître de stage NA		
Projet de l'ISE (éventuel) auquel le mémoire est rattaché	Echange universitaire avec la Chinese University of Hong Kong (CUHK)			
Bourse (éventuelle) reçue par l'étudiant	Bourse mobilité et la bourse Schmidheiny			
COLLATION*	Nb de pages* 79	Nb de figures* 23	Nb de tableaux*	
TERRAIN D'ETUDE OU D'APPLICATION	Pollution marine des microplastiques			
MOTS-CLES* (entre 5 et 10)	Plastic pollution; Coastal Waters; Microplastics, Marine, Sediments; Temporal Variation; Spatial Variation, China, Hong Kong.			
SUMMARY* (en anglais)	<p>Hong Kong is located in the world's most populated region, in an area where marine pollution guidelines do not address the problems associated with microplastics. Various sources of pollution remain to this day uncontrolled and lack governmental supervision and policy enforcement. The lack of policy enforcement in this area is due to the fact that there is insufficient supporting evidence from a scientific perspective. The presence of plastic waste with a diameter of less than 5 mm ("microplastics") in marine environments has prompted increasing concern in recent years, both locally and globally. We conducted seasonal surveys of microplastic pollution in the surface waters and sediments from Deep Bay, Tolo Harbor, Tsing Yi, and Victoria Harbor in Hong Kong between June 2015 and March 2016. The average concentrations of microplastics in local coastal waters and sediments respectively ranged from 51 to 27'909 particles per 100 m³ and 49 to 279 particles per kilogram. Microplastics of different shapes (mainly fragments, lines, fibers, and pellets) were identified as polypropylene, low-density polyethylene, high-density polyethylene, a blend of polypropylene and ethylene propylene, and styrene acrylonitrile by means of Attenuated Total Reflectance - Fourier Transform Infrared Spectroscopy. This is the first comprehensive study to assess the spatial and temporal variations of microplastic pollution in Hong Kong coastal regions.</p>			
REMARQUES	Mémoire de Master effectué dans le cadre d'un échange avec la Chinese University of Hong Kong			