# Research\&Development Engineer 

# Kaviraj SOMAR 

## GENERAL INFORMATION:

\(\left.\begin{array}{ll}Address \& : 17, Avenue Pigeot, <br>

\& Rose-Hill, Mauritius\end{array}\right]\)| Tel | $:+23057565770$ |
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| Email | $:$ Kaviraj.somar @ gmail.com |
| Date of birth | $: 04$ November 1981 |
| Age $\quad: 39$ |  |
| Marital status:Single |  |
| Sex $\quad:$ Male |  |
| Language $\quad:$ English and French |  |

## ACADEMIC QUALIFICATIONS:

M.Sc. in Biotechnology \&Biodetection, 2011

University of Montpellier, Montpellier, France

## B.Sc. in Biotechnology, 2009

University of Montpellier, Montpellier, France

Cambridge Higher School Certificate, 2000
John Kennedy College, Mauritius

## TOOLS:

* Low Pressure Liquid Chromatography (LPLC)
* High Pressure Liquid Chromatography (HPLC)
* Gas Chromatography Mass Spectrometry (GC-MS)
* Gel electrophoresis,Electro-immuno diffusion, Western Blot and ELISA
* PCR amplification, Northern and Southern Blot
* Evapostalagmometry : a new technique for characterizing bio-fuels
* Computer literate : Good knowledge of Microsoft office tools
* Bioinformatics : Blast software


## SKILLS:

* Protein extraction and analysis
* Protein purification using chromatography techniques
* Detection and identification of micro-organisms(prokaryotes / eukaryotes) for food safety
* Detection of chemical and biological pollutants inthe environment and the food processing sector
* Analysis of the production chain by quality control methods to meet quality specifications forprocessed food and drugs
* Fight against frauds and counterfeits of foodproducts, drugs and non-food products


## WORK EXPERIENCE:

Director of Somatoes Ltd, as from January 2013 up to now, in Solferino, Vacoas.
$\checkmark$ Production, marketing and sale of vegetables like tomatoes, cherry tomatoes, bell pepper, English cucumber and lettuce in greenhouse

## Key words: Tomatoes, Bellpepper, Lettuce, Greenhouse

Technical officer at AlbionFishries ResearchCentre, as from October 2013, for 3 years, under the Service to Mauritius Programme
$\checkmark$ Monitoring of chemical and microbiological parameters of seawater around Mauritius
$\checkmark$ Rehabilitation of stranded and injured marine animal around Mauritius
Key words: Chemical Parameters, Microbiological parameters, Seawater, Marine animals

## WORK EXPERIENCE:

Quality control Engineer, as from March 2012, for a 7 month placemen at CIRAD (Centre de coopérationinternationale en rechercheagronomique pour le développement) in Montpellier, France
$\checkmark$ Quantification of phorbol esters, a toxic compound, in different plant matrices such as leaves fruits and roots of cultivars using Jatropha curcas seedcake as fertilizer.
$\checkmark$ Extraction as well as the purification of curcin, a protein with anticancer properties, from Jatropha curcas seeds for the synthesis of curcine antibodies prior to the development of a quantification method based on electro-immuno-diffusion techniques..
Key words: Jatropha, Phorbol Ester, HPLC, Methanol, Curcin, Antibodies, Seed-cake

Quality Control Engineer, as from July 2011, for an 8 month placement at CIRAD (Centre de coopérationinternationale en rechercheagronomique pour le développement) in Montpellier, France
$\checkmark$ Quality control of Pure Plant Oil, satisfying DIN 61560 standards, for use as fuel in off-road vehicles.
$\checkmark$ Bestowing special properties to PPO like high oxidative stability and absence of deposits in the engine through addition of various additives.

Key words: PPO, Additives, DIN 61560, Fatty Acids, Off-road vehicles, Quality control

Quality Control Engineer Assistant, as from October 2010, for a 7 month placement at Les Poisson du soleil, a fish hatchery in Balaruc-les-Bains, France
$\checkmark$ Quantification of chemical pollutants such as the formalin, oxytetracycline, benzocaine, sodium hydroxide and chlorine, present in the waste water of Les poisons du soleil company, so as to obtain ISO 14001 certification

Key words: Formol, Benzocaine, Oxytetracycline, ISO 14001, Fish Hatchery, Waste-water

R\&D Engineer Assistant, as from November 2009, for a 9 month placement at Ackroz R\&D Labs in Montpellier, France
$\checkmark$ Traceability of Hermès masterpieces by using nanoparticles containing fluorescent plant extracts so as to generate a "vegetable's print or tag" with 3 reading levels

Key words: Traceability, Masterpieces, Counterfeit, Nanoparticles, Plant Extract, Fluorescence, Vegetable's print

