

### SUSANNE YVONNE KARCHER

Integrated Resources and Waste Minimisation Specialist

### **PROFILE**

Eradicating waste and any other forms of pollution by challenging the traditional understanding of human consumption patterns and material production efficiencies is what I am passionate about......

### **CONTACT**

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# **FORMAL EDUCATION**

#### **Biological Technician**

1986 Apprenticeship Completed

Followed by 3 years of practical work in the field of Laboratory Medicine (Radiology, Immunology, Toxicology etc.)

#### Carl-Engler School

1988-1990

Obtained Technical Matric in June 1990

#### Karlsruhe Institute of Technology (University)- KIT 1991-1997

Obtained German Chemical Engineering degree (Dipl.Ing.) equivalent to an M.Sc. in 1997. Final year thesis completed at the Chemical Engineering Dept. at University of Cape Town (UCT)

## **AFFILIATIONS**

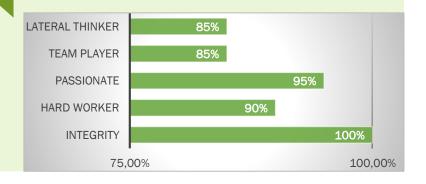
- Director/Owner of environmental consulting firm EnviroSense CC- www.envirosensecc.co.za
- Chair and Coordinator of the Southern African e-Waste Alliance (SAEWA)- sa.ewastealliance.co.za
- Qualified Trainer for RECP Courses-South African National Cleaner Production Center -www.ncpc.co.za
- Co-Founder of the African Circular Economy Network (ACEN) acen.africa
- Mentor for the "Circular Economy Club"https://www.circulareconomyclub.com/
- Appointed WEEE "International Policy Expert Pool" Member for the World Resources Forum (WRF)- www.wrforum.org
- Long standing working collaborations: JG Afrika (www.jgafrika.co.za); Circular Vision (www.circular-vision.com)

#### Other:

Professional Member: Institute of Waste Management Southern Africa (IWMSA)

**IWMSA Western Cape Branch Committee Member** 

# PERSONAL TRAITS



# RECENT WORK EXPERIENCE

### 2018

- Co-Author: "ERA WEEE Industrial Waste Management Plan<sup>1</sup>"- ERA
- Founding Director of ERA-NPC (future PRO for responsible e-waste management)
- Co-Author: "Pilot Testing of GPs ISO IWA 19:2017 South Africa2"-Sustainable Recycling Forum
- "Waste pickers and environmentally friendly job creation3"- Cape Town TV
- Writing of the "Lighting Industry Waste Management Plan4"- Lightcycle SA
- Lead Author: "From Worst to Good Practices in Secondary Metals Recovery: FACT SHEETS5"-SRI
- Appointed (in SAEWA Chair capacity) in the Training Team for the Ghana e-Waste Project- GIZ/WRF
- Appointed "International e-Waste Expert Panel Team" member to advise on policy development in Ghana-WRF
- Co-Development / Facilitation of "Beyond Waste" One Day Training Course for IWMSA-IWMSA/Circular-Vision

#### 2017

- Co-Author: "Guidance Principles for the Sustainable Management of Secondary Metals<sup>6</sup>"- WRF
- Approved as Member and Qualified Mentor of the "Circular Economy Club<sup>7</sup>"-CEC
- Co-Facilitation of the e-waste Academy Management (EWAM) Training in Tanzania- United Nations University
- Quarterly publication information: "Legal e-Waste Bulletin for South Africa" for Sofies clients- SOFIES
- Contributed South Africa and SAEWA information to the first e-Waste MOOC<sup>8</sup> WRF/KIC Climate Change

#### 2016

- Wrote Report "Situational Analysis for Industrial Water Efficiency in South Africa" NCPC
- Research on import restriction for e-waste from SADC countries to South Africa-SOFIES Switzerland
- Qualified as Lead facilitator for NCPC RECP End User Training
- Completed Green Screen Hazard Assessment Course (Clean Production Action)
- Market Readiness, Feasibility & Technical Specs for the City of Cape Town Chemicals Supply Chain –JG Afrika
- Co-Founder of the African Circular Economy Network (ACEN<sup>9</sup>)

#### 2015

- Development of South Africa's first on-line waste and materials management training course- IWMSA
- Qualified as "Hazardous Waste" Trainer for IWMSA course- IWMSA
- Co-authored the development of a South African Industrial Symbiosis Strategy GreenCape/JG Afrika
- e-Waste Market research, stakeholder analysis and summary report of e-waste related legislation -SOFIES
- Invited to attend the SRI Roundtable / World Resources Forum in Davos, Switzerland (14-16 October 2015)
- Obtained qualification as an NCPC RECP End User Trainer

<sup>1</sup> www.eranpc.co.za

<sup>&</sup>lt;sup>2</sup> available upon authorised request

<sup>&</sup>lt;sup>3</sup> available on request

<sup>&</sup>lt;sup>4</sup> available upon authorised request

<sup>&</sup>lt;sup>5</sup> https://www.sustainable-recycling.org/wp-content/uploads/2018/07/worst-practices-web-25.7.18.pdf

<sup>6</sup> https://www.sustainable-recycling.org/1549-2/

<sup>&</sup>lt;sup>7</sup> https://www.circulareconomyclub.com/groups/cec\_mentors/members/

<sup>8</sup> https://learning.climate-kic.org/en/docman-demo/151-stakeholder-map-interest-and-relevance

<sup>9</sup> acen.africa

# WORK EXPERIENCE 2014-1999 (HIGHLIGHTS)

#### 2014-2010

- Contributing Author "Zero Vision Handbook": Role of EPR in the e-waste recycling industry- Alive2Green
- Development of assorted PET Recycling Fact Sheets -PETCO
- Rewriting (as co-author) of IWMSA Non-Accredited Training Course Material-IWMSA
- Swap Shop research and summary of successful waste minimisation projects- Lonmin Platinum
- NCPC Cleaner Production Audits and Reports (IVECO, Muffin Mate, Damaak, Dry Ice)- NCPC/JG Afrika.
- Co-Authored RECP Training Material for Property Managers- NCPC/JG Afrika
- Team member: City of Cape Town's "WasteWise" campaign (2010-2013)<sup>10</sup>- Jeffares & Green<sup>11</sup>
- Technical Specs for the City of Cape Town's Green Procurement programme- CoCT/Jeffares&Green
- Development of an Operational Materials Management Plan & Supplier Score Cards Hotel Verde<sup>12</sup>
- Development of three e-waste recycler guidebooks German Society for International Collaboration (GIZ)/MTN
- Re-assessment of the MSA Section 78(3) towards Waste Minimisation City of Cape Town/Jeffares & Green
- Cleaner Production training /auditing of South African Automotive Industry Suppliers Jeffares & Green/NCPC
- Co--author: Responsible management &disposal of pharmaceutical waste in Namibia- US Aid/Jeffares & Green
- Integrated waste management strategies for West Africa- UNEP (7 Framework Programme)/ICANDO
- Development of a chemical evaluations protocol for textile dyes- Svenmills/Jeffares & Green
- Evaluation of EH&S impact of laundry and cleaning chemicals- Vineyard Hotel
- Waste Revolution Handbook (1): e-waste management in South Africa- Alive2Green publishers
- ETDP SETA training and accreditation as Waste Management Training "Assessor" and "Facilitator" IWMSA

#### 2009-2000

- Collection strategy for Household Hazardous Waste in the Western Cape Province-Golder/DEA&DP
- W.Cape Green Procurement Policy & Implementation Programme Incite Sustainability/ DEA&DP
- Development of a collection strategy for Compact Fluorescent Tubes in the Western Cape- ESKOM/Golder
- Development of criteria for a green rating system for hotels in South Africa-SEA
- Set-Up, Monitoring & Evaluation of a Cape Town based Pilot e-Waste Recovery Facility HP/EMPA/DSF
- Review of the Northern Province Integrated Waste Management Plan -Jeffares & Green
- Waste minimization guidelines for the FIFA Worldcup 2010 Event Greening initiative- Steadfast Greening
- Waste minimisation strategies for LONMIN Platinum's Integrated Waste Management Plan –Golder
- Co-Author: City of Windhoek's Integrated Waste Management Legislation & Policies Jeffares & Green
- Diamond ship waste trail audit and development of hazardous waste manifest-De Beers Marine Namiba
- Basic Environmental Management Training for CoCT Solid Waste managers- Steadfast Greening
- Co-author: City of Cape Town's Integrated Waste Management Plan. & Policy- Jeffares & Green
- Co-Author: Status Quo Report of Cleaner Production in RSA (DEAT)
- Initiation and Management of Stellenbosch Municipality "Blue Bag" Household Recycling Project
- Hotel audits for DEA&DP's "Cleaner Production in the Tourism and Hospitality pilot project- SEA
- Technical adviser and waste minimisation specialist for the Rustenburg Municipality IWMP- Jeffares & Green
- 10 Year Waste Action Plan (as part of the SDIP) for the Western Cape- University of Cape Town
- Assistance with the development of the Pikitup Strategic Roadmap- JPCE/PDNA
- "Good Business Journey" waste minimisation strategic assistance in headquarter- Woolworths
- Developed first South African Integrated Waste Exchange service- City of Cape Town
- "Integrated Waste Management Strategy" plan for Canal Walk City of Cape Town
- Co-Author: CSIR's Green Buildings for Africa manual for Office Waste Reduction- BECO
- Startup/running of four pilot industrial/commercial Waste Minimisation Clubs- BECO/City of Cape Town
- Startup/M&E of the (first South African) Yellow Bag Household Recycling Programme pilot City of Cape Town
- Parow Industria "Dare to Dream Campaign "and startup local Waste Minimisation Club- City of Cape Town
- Technical Input (Industry & Commerce) for compilation of the City of Cape Town "State of Energy Report",
  Cape Town Energy Strategy Draft and numerous State of Environment reports- City of Cape Town

<sup>&</sup>lt;sup>10</sup> Waste Wise was the City of Cape Town's Public Anti-Litter/Dumping campaign and the consultant team was awarded best runner-up for African Public Participation projects in 2013.

<sup>11</sup> Jeffares & Green was re-branded as JG Afrika

<sup>&</sup>lt;sup>12</sup> Hotel Verde became the first hotel in the world to be certified with LEED Double Platinum for New Construction and Operation by the US Green Building Council and it is certified Heritage Platinum

# **CORE COMPETENCE AREAS**

Conceptualization and professional
formulation of high-level strategies, policies,
standards and proposed action plans linked
to:

- Circular Economy
- ✓ Systems Thinking
- Integrated Resource Management & Pollution
- Prevention
- ✓ Waste Exchange
- Waste Beneficiation
- Industrial Symbiosis

- Industrial Waste Management Plans
- Integrated Waste Management Plans
- International Guidelines and Fact Sheets
- Development of CE focused Training Materials
- Baseline Consumption Evaluations/Status Quorenorts
- Green Procurement Policies
- Score Cards
- Operational Materials Management Plans
- Industry/waste stream specific "Technical and Operational Norms and Standards"
- "Best Practice" Operational Manuals
- Academic papers and contributions to publications

### **Resource Efficient Cleaner Production (RECP)**

- High-level Strategic Planning
- Project Initiation
- Baseline Setting
- Auditing & In Plant Assessments
- Data Capturing
- Monitoring and Evaluation of RECP Impact
- Feasibility studies
- RECP Training Materials Development
- RECP Training
- Management of RECP entire projects (e.g. Waste Minimisation Clubs)

# Planning for RECP initiatives, auditing and report writing

Training development and facilitation

Daily co-management and marketing of the two NPOs:

- Southern African e-Waste Alliance (SAEWA)
- African Circular Economy Network (ACEN)
- SMME development and training facilitation
- Public education and outreach
- Provision/organisation of practical services and events (e.g. for WEEE collection, co-management of Repair Cafes etc.)
- Regular outreach to the wider African ACEN network and international CE/WEEE experts via regular knowledge exchange sessions
- Due diligence and compliance audits
- Legal overviews and stakeholder reports
- Regular media exposure (TV, radio, conferences)