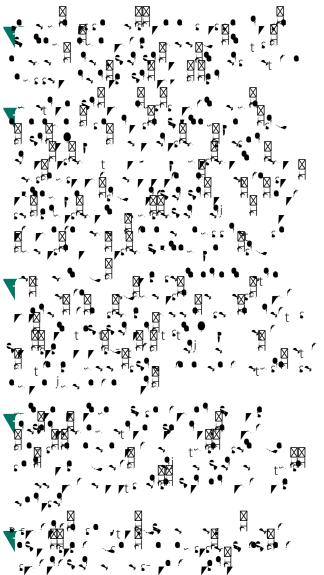
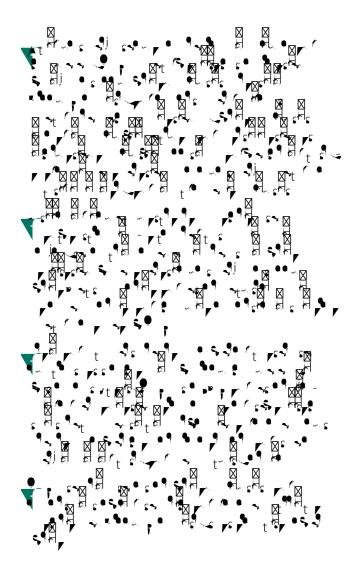


## **TABLE OF CONTENTS**

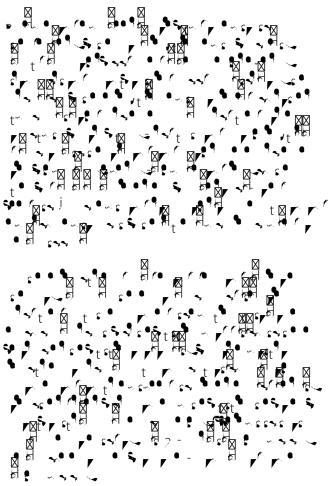
F			2
В			3
F			4
R,	· · · · · · · · · · · · · · · · · · ·		5
1. I	•		6
<b>2. M</b>	S Z t p		9
<b>3.</b> N 2 2	B F $\otimes$ R $\Rightarrow$ $\otimes$ $\otimes$ 1.1 2. M $\Rightarrow$ $\Rightarrow$ $\Rightarrow$ $\Rightarrow$ $f$ $f$ $\Rightarrow$ $f$	14 • <sup>•</sup> t • 4	
8 87			17 , ,
5. G	С 🗯 🖬	· 🛛 🖬 · · A ·	21
6. R			22
7. A	•		23

## RECOMMENDATIONS





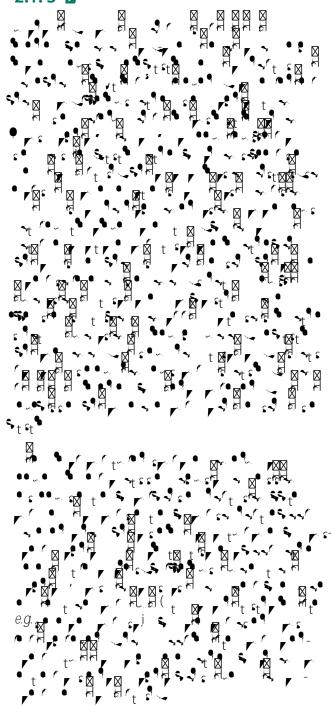
# **1. INTRODUCTION**

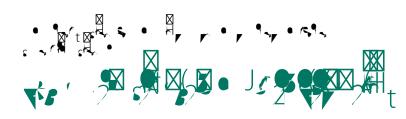


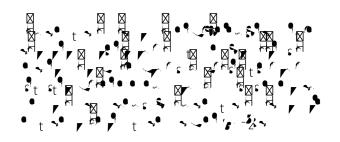
Green science and engineering for sustainable growth in Africa

## 2. MANUFACTURING – SUSTAINABLE CHEMISTRY

#### 2.1. S 📓







2.2.	R 🛛		• 🕅	
•	<b>,</b>	5 <b>F</b> 5	X H , •\$ <sup>9</sup> , ;•	<b>∿</b> ⁰ ⊊∿

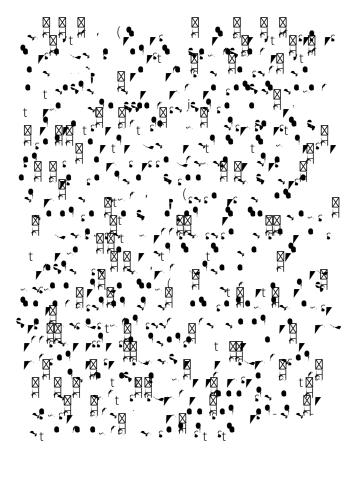
~ & \$ t ۲ ک Ň `⊠ •∽ 1 Þ, N N ••• N N **\***† 6 Ø t • • • t∽⊠ দ `t ▼t •**\$** • • • **7**% F 5 .... ~ **; \$** r **9** <sub>0</sub> t **s** - d F 5 t d

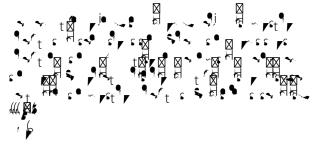


o <sup>.</sup>	с . <b>"</b> В	R , , , , , , , G C , , , S -	
E .			
			_

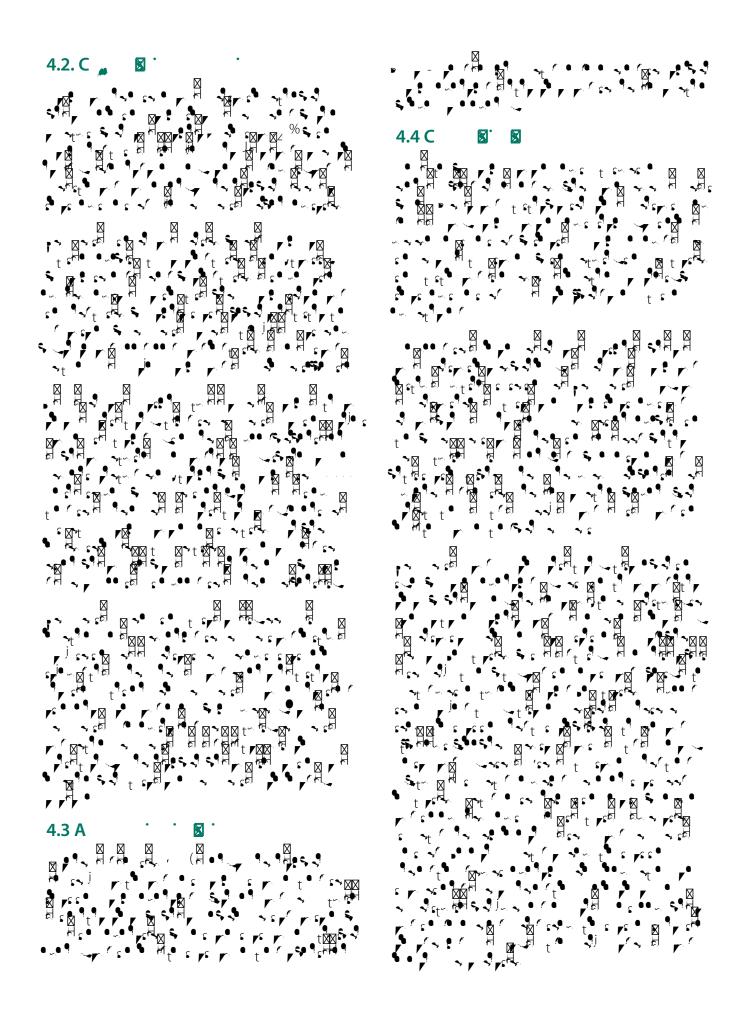
s<sup>⊠</sup>•y: ∽ y!

Green science and engineering for sustainable growth in Africa  $\mathbf{M}_{\!\scriptscriptstyle \mathcal{L}}$ 





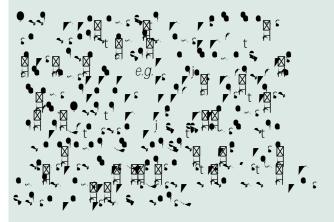
3⊠•<sub>7</sub>: ∽: 7:



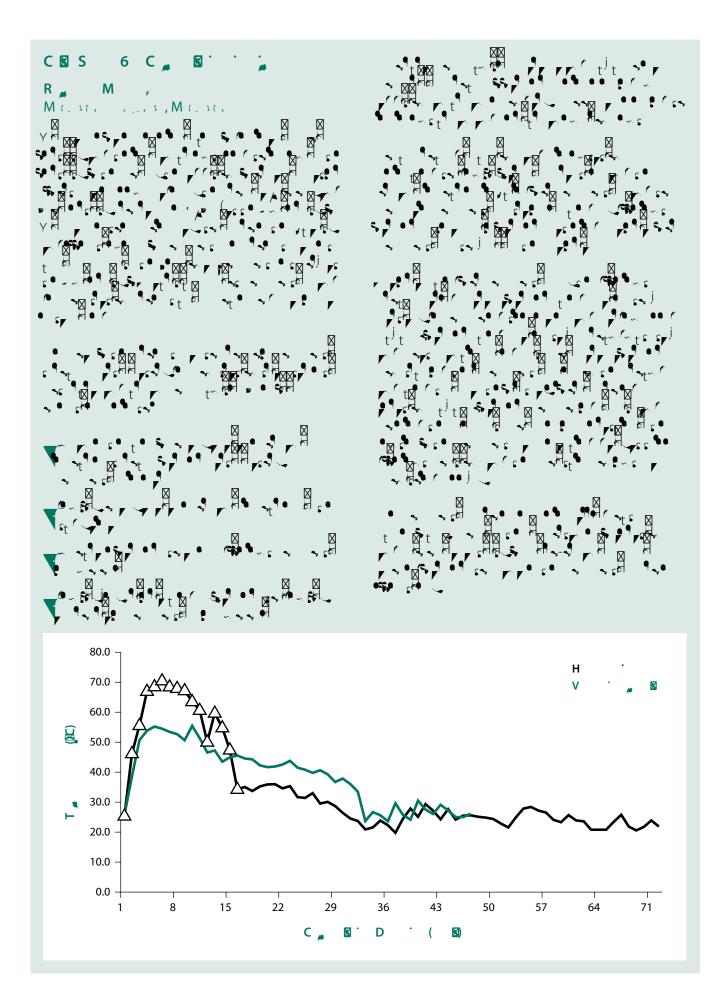
, <sup>⊠</sup>•<sub></sub>, ∽, <sub></sub>;

CISS 5 SE ACISS DESS C',T

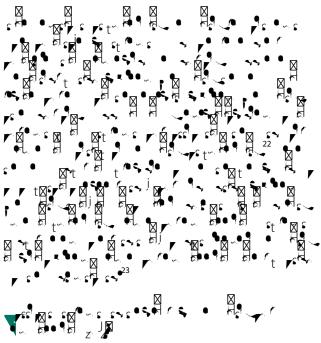
M\* A.K⊠ ; C, (m, ) D, (1m, ) √(1, ) D, (1S, m,



) ٩ ـ ٩ ـ الرا ٩ الري ـ جود ل

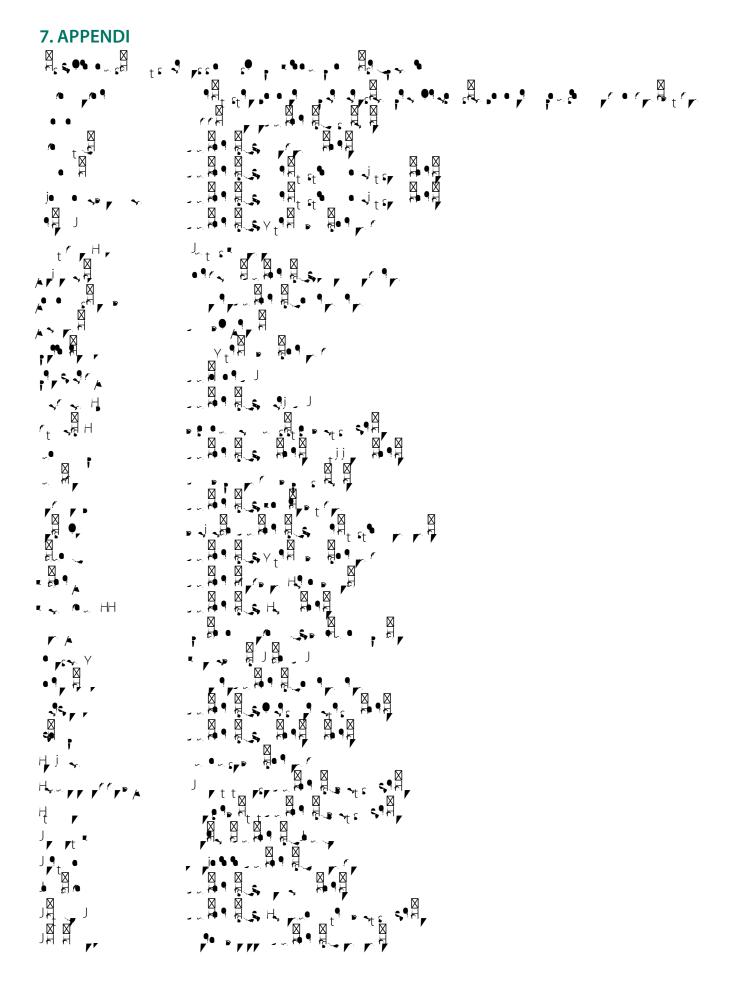


### 5. GREEN CHEMISTR EDUCATION FOR SUSTAINABLE DEVELOPMENT IN AFRICA



### **6. REFERENCES**





Green science and engineering for sustainable growth in Africa  $\mathbf{Z}_{\gamma}$ 

• t <sup>™</sup> r<sup>•</sup> S• <sup>™</sup> • t <sup>™</sup> ┘<sub>t</sub>┈╸。、ァ ● ผู• t ● / , <u>/ </u>• H • rt<sup>s</sup>t t<sup>s</sup>t t<sup>s</sup>t t<sup>s</sup>t ∽rt t' γ ŶĦ γ t<sup>j</sup>r r<sup>●</sup> t on ⊠ r ⊊j r J Ptrop r→P = H r ^ je t 1.3 ; 1 ~ ~ Y **y y**t **b** Y **y y**t **b** Y **y b** 

s<sup>⊠</sup>•y: ∽; y!

Green science and engineering for sustainable growth in Africa  $\mathbf{M}_{\!\scriptscriptstyle \mathcal{L}}$