




# Research

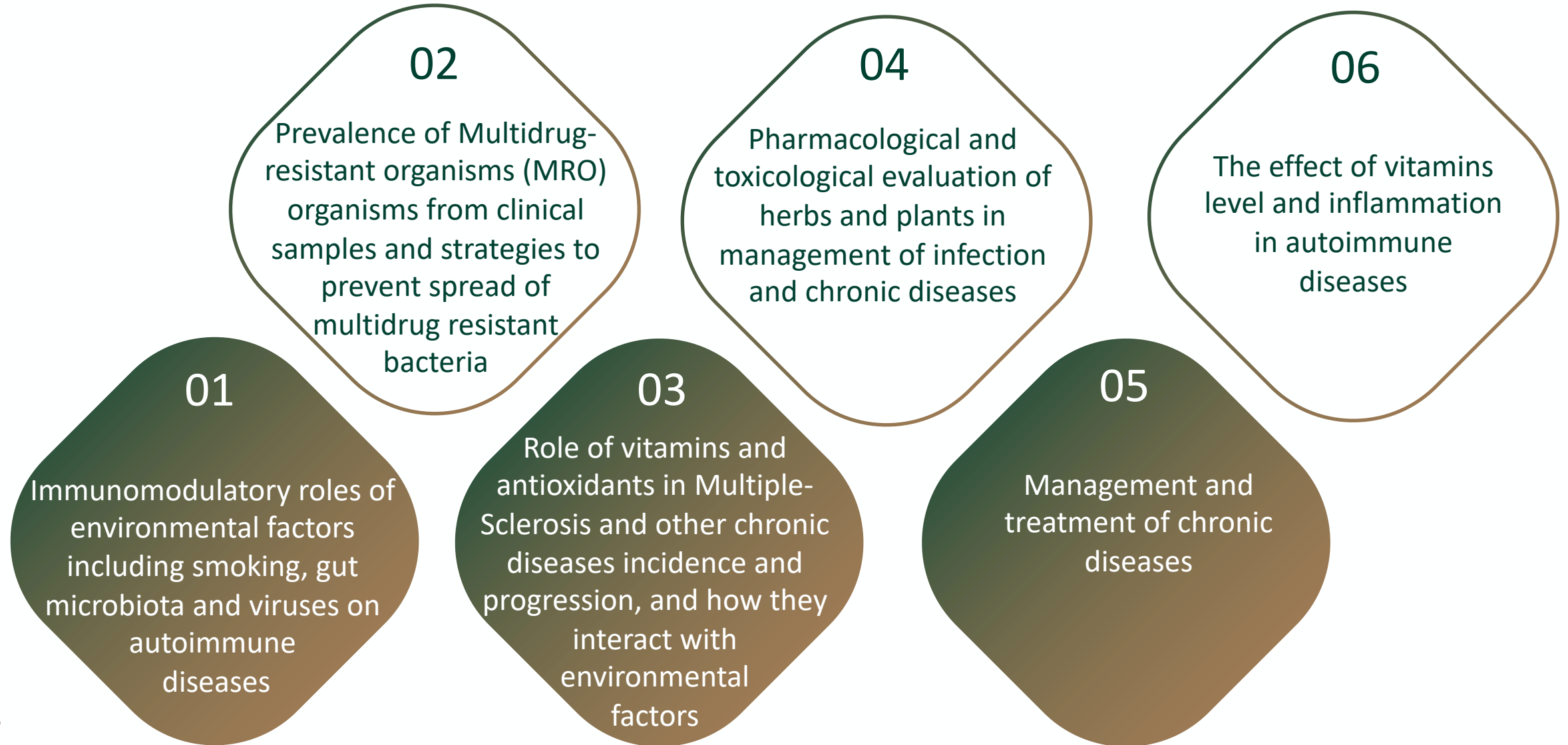
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## Priorities & Activities

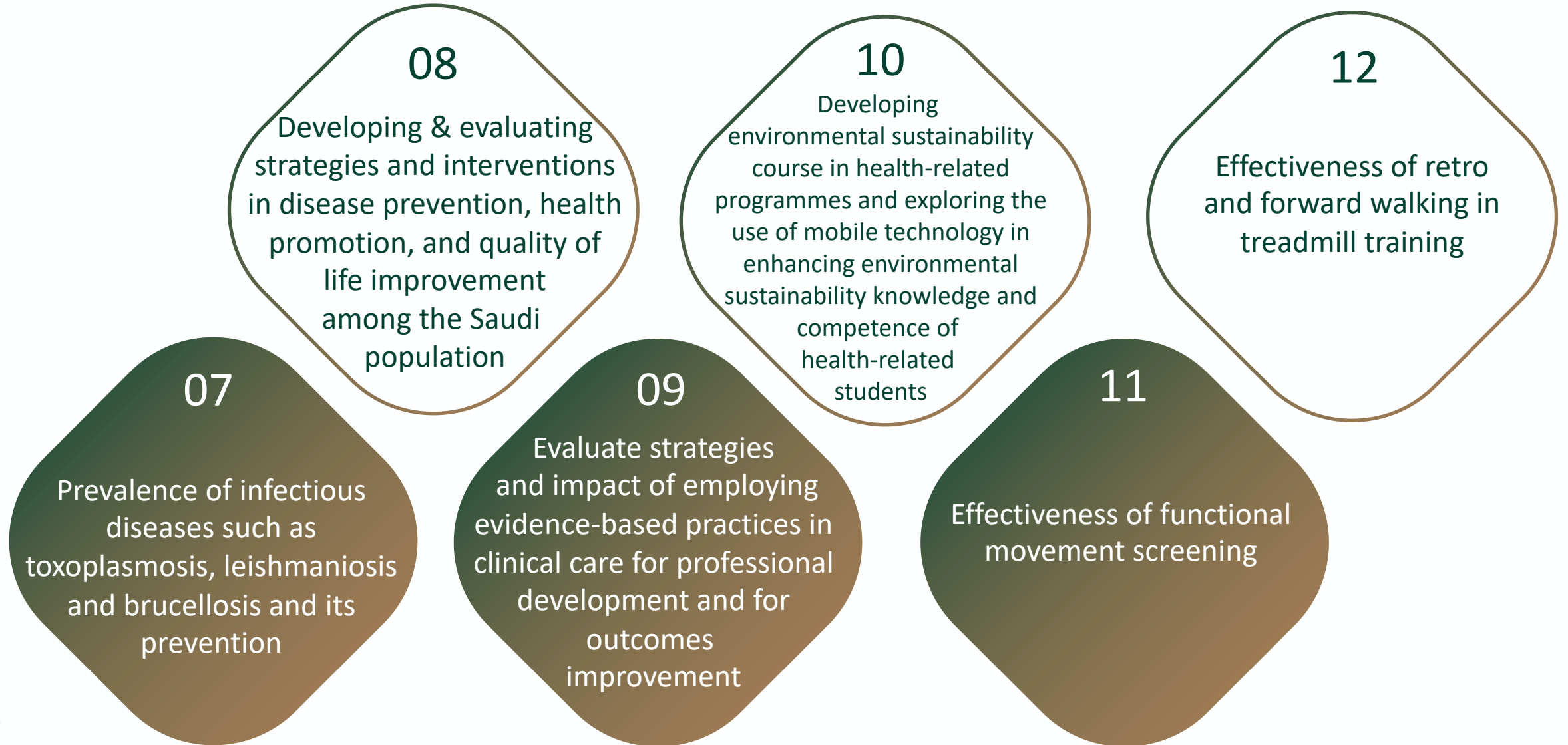


**Priority 1  
Medical and Health  
Sciences**

# Activities of Priority 1



# Activities of Priority 1



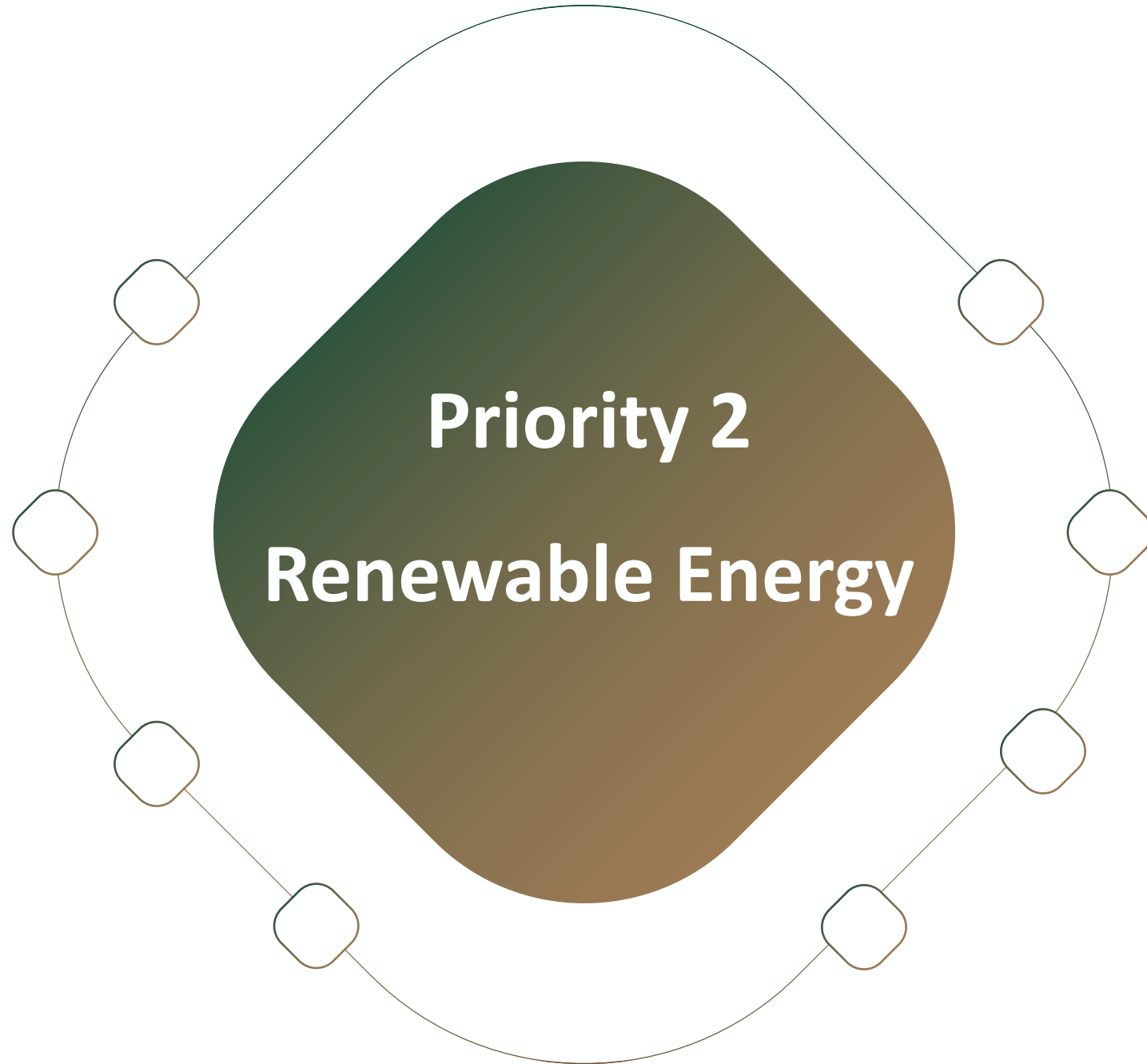
# Activities of Priority 1

13

Influence of Body Mass Index (BMI) on vital parameters and pulmonary function

14

Influence of abdominal obesity on movement performance in young adults



# Activities of Priority 2

01

Designing of Antennas and Microwave Systems

04

Designing of Photonic Devices and Li-Fi

02

Using Photonic Antennas in Renewable Energy

05

Enhancing the optical networks

03

Implementation of MIMO Technology for Future Communications

06

New trends in renewable energy systems

# Activities of Priority 2

07

Improving the electric power system

10

Cooling of solar photovoltaic cells using absorption cooling

08

New trends in high voltage engineering

11

Potential of Parabolic Trough Solar Concentrator for Electric Energy Production

09

Cooling of solar photovoltaic cells using Ferro-fluid in the presence of alternating magnetic field

12

Materials Sciences and Renewable Energy and Their Applications



# Activities of Priority 2

13

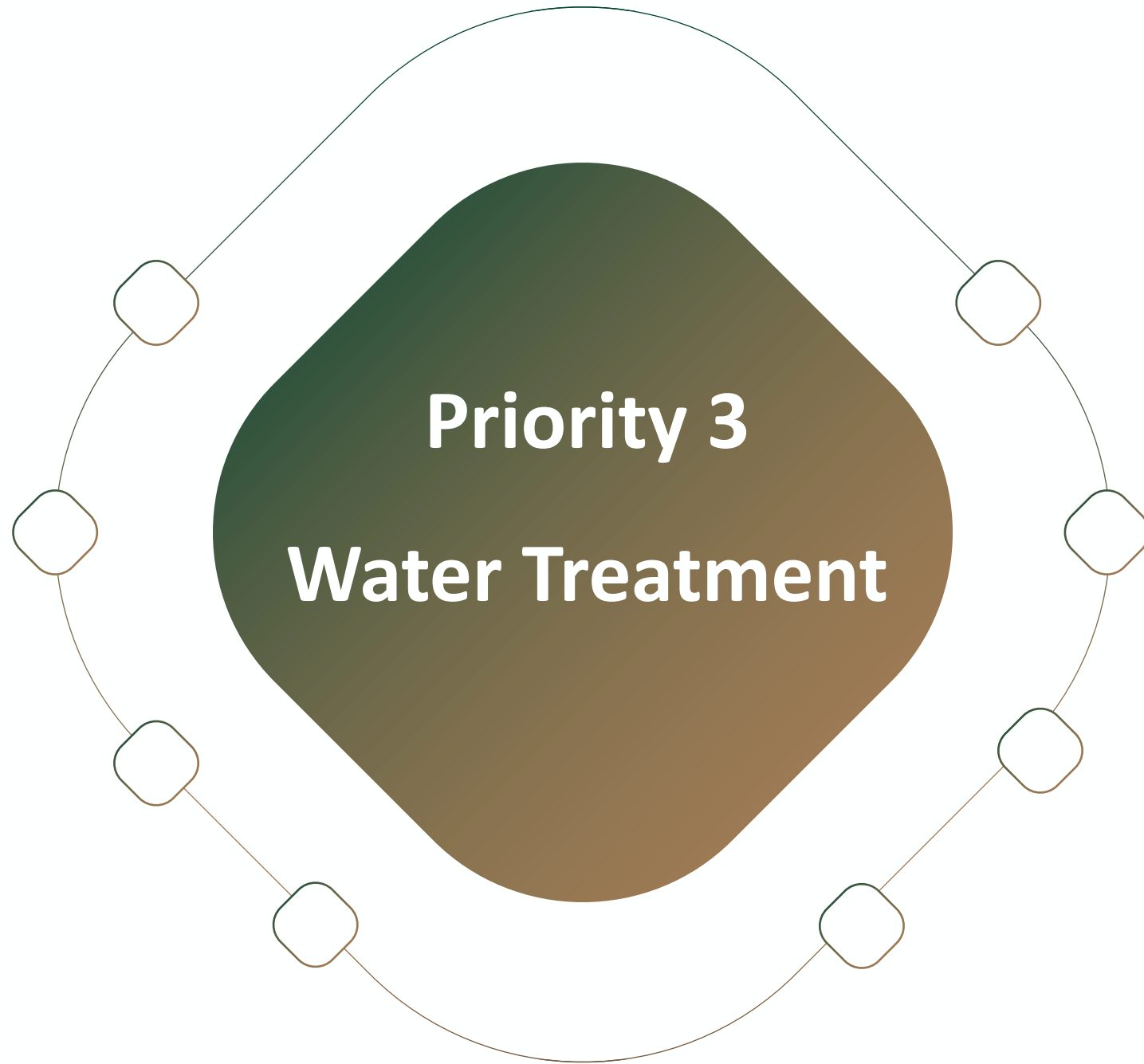
A novel technique for the truthful joining of dissimilar alloys via friction melt-bonded welding

14

Sustainable Fire Resistant Construction Solutions using Waste Tyres in Saudi Arabia

15

Deep learning, Machine Learning and Artificial Intelligence applications



# Activities of Priority 3

01

Reinforcing the  
already established  
specialized  
laboratory

03

Water technologies

05

Water  
desalination

02

Water resources  
evaluation

04

Water treatment

06

Corrosion and  
degradation



جامعة شقراء

Shaqra University

عمادة البحث العلمي