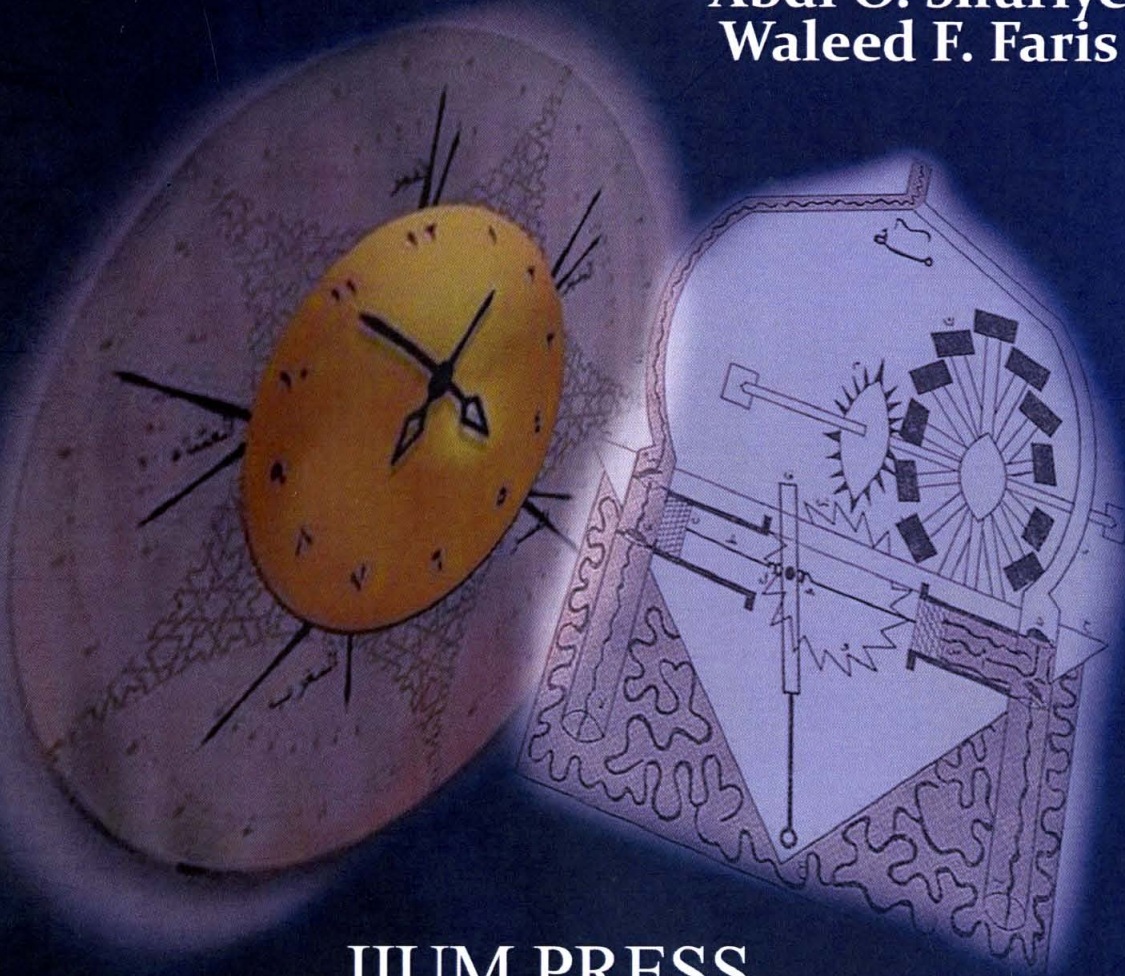


Contributions of Early Muslim Scientists to Engineering Studies and Related Sciences

Abdi O. Shuriye
Waleed F. Faris



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Editors

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CHAPTER FIVE

CONTRIBUTIONS OF AL-RAZI ON ALCHEMY IN TERMS OF METAL AND SUBSTANCE

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5.1 INTRODUCTION

Ancient Greek philosophers make a great contribution to the history of chemistry and the knowledge has been passed into the domain of the Islamic scholars. During that time, the Greeks did not yet make any distinction between alchemy and any of the other natural sciences, instead merging it together with their philosophical and religious beliefs. Nevertheless, the basic knowledge of chemistry which surface by Aristotle (the four elements theory) is preserved by the Islamic scholar and also added their own observation to it. The Islamic scholars optimistically refined Ancient Greek alchemy and the foundation of the first separation of chemistry as a separate discipline. Their alchemy is based on Aristotelian idea of four elements and endeavor to integrate them with their beliefs in Allah and their studies into psychology, medicine and physics.

The methodology implemented in the research is based on data which are collected from articles, journals and books. This research studies on contribution of Al-Razi in alchemy and its related fields. Furthermore, the main focus of this research is to discuss about alchemy and his work on metal and substance, especially Al-Razi belief in the possibility of the transmutation of lesser metals to silver and gold which being a benchmark in the world of chemistry nowadays. The objective of this research is to explore and acknowledge the important work of Al-Razi in metal that shape world of alchemy and chemistry. The significance of this research is to gain knowledge and know about the history of Al-Razi as one of Muslim scholars who has been known as father of chemistry as Geber is often referred to as the father of alchemy.

5.2 HISTORY OF AL-RAZI

Al-Razi or also known as Rhazes or Rasis with the full Arabic name Abu Abu Bakr Muhammad ibn Zakariya al-Razi. According to Al-Biruni he was born in Rayy, Iran in the year 865 C.E (251 a.h.), and died there in 925 C.E. (313 a.h.). In his early life he could have been a musician or singer but more likely a lute-player who shifter his interest from music to alchemy. At the age of 30 he stopped his study of alchemy because of his experimentation had caused an eye-disease, obliging him to search for physicians and medicine to cure it. Al-Biruni, Beyhaqi and others, say this was the reason why he began his medical studies. Al-Razi was a versatile Persian physician, philosopher and scholar