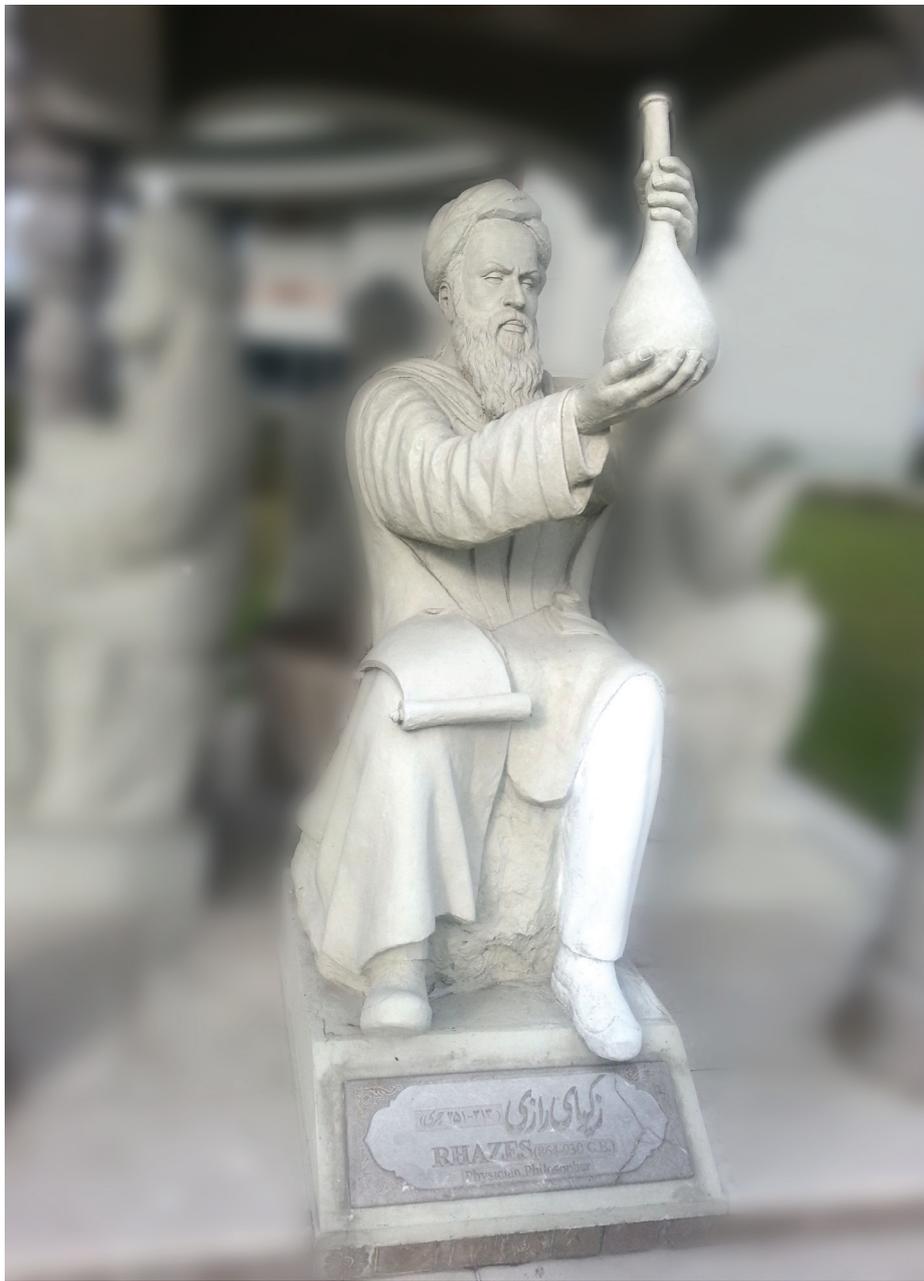


“His writings on smallpox and measles show originality and accuracy, and his essay on infectious diseases was the first scientific treatise on the subject”.

(The Bulletin of the World Health Organization, May 1970)

I



Statues of Iranian Rhazes at UN Office in Vienna

Muhammad ibn Zakariyya al-Razi (محمد زکریای رازی) Rhazes or Rasis) (854–925 CE)
A Persian polymath, physician, chemist, philosopher and a theoretician in astronomy and grammar

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Razi was born in the city of Ray-near Tehran, Iran. He was the founder of Baghdad hospital and he adopted what is now known as an evidence-based approach to find the best place to build up his hospital. He hung fresh meat in various places throughout the city and cleverly built the hospital where meat took longest to rot. Razi was a generous

with a considerate attitude towards his patients and treated poor people without payment. Razi wrote a treatise *Man La Yahduruhu al-Tabīb*, or *Who Has No Physician to Attend Him*, with medical advice for poor people. After his death, his fame spread beyond the Middle East to Medieval Europe, and lived on. In an undated catalogue of the library at Peterborough Abbey in England, most likely from the 14th century, Razi is listed as a part author of ten famous books on medicine.

Razi's contribution to the medicine and other sciences:

- Psychology: He is considered the father of psychology and psychotherapy.
- Smallpox vs. measles: This diagnosis is acknowledged by the *Encyclopædia Britannica* (1911), which states: "The most trustworthy statements as to the early existence of the disease are found in an account by the 9th-century Persian physician Rhazes, by whom its symptoms were clearly described, its pathology explained by a humoral or fermentation theory, and directions given for its treatment."
- Meningitis: Razi compared the outcome of patients with meningitis treated with blood-letting with the outcome of those treated without it to see if blood-letting could help.
- Pharmacy: Razi compiled many texts in pharmacy, in which he introduces the use of "mercurial ointments", apparatus such as mortars, flasks, spatulas and phials.
- Alcohol: Razi is known as the first person who produced Alcohol for medical and chemical use.
- Ethics of medicine: Razi introduced many practical, progressive, medical and psychological ideas. He attacked charlatans and fake doctors. Also, pertaining to the latter, he commented that in the case of advanced cases of cancer and leprosy the physician

should not be blamed when he could not cure them. His famous ethical quote is: "The doctor's aim is to do good, even to our enemies, so much more to our friends, and my profession forbids us to do harm to our kindred, as it is instituted for the benefit and welfare of the human race, and God imposed on physicians the oath not to compose mortiferous remedies.

Razi wrote many books and articles in different fields of science that left great influences on the academic knowledge, especially on medicine and chemistry. His famous books are: A) *Al-Kitab al Hawi* which is a medical textbook in 23 volumes containing the foundation of gynaecology, obstetrics and ophthalmic surgery B) *For One Who Has No Physician to Attend Him (Man la Yahduruhu Al-Tabib)*, which is a very first home medical manual (remedial) that offers medical advice to the general public and poor people. C) *Doubts About Galen (Shukuk 'ala alinisor)* that rejects the Greek physician, Galen's theories and views D) *The Diseases of Children* which was the first ever monograph to deal with paediatrics as an independent field of medicine.

In general Razi wrote 64 with medical contents that of them 11 are available in English including *Mofid al Khavas (The Book for the Elite)*, *The Book of Experiences*, *The Cause of the Death of Most Animals because of Poisonous Winds*, *The Physicians' Experiments*, *The Person Who Has No Access to Physicians*, *The Big Pharmacology*, *The Small Pharmacology*, *Gout*, *Al Shakook ala Jalinoos*, *The Doubt on Galen*, *Kidney and Bladder Stones*, *Ketabtibbar-Ruhani*, *The Spiritual Physik of Rhazes*.

Razi wrote about 30 books on alchemy which are all in Persian. The most famous titles of them are *Ketabe Azmayeshe Zarva Sim (Experimentation on Gold)*, *Ketabe Serr (The Book of Secrets)*, *Ketabe Serre Serr (The Secret of Secrets)*

Razi's manuscripts on Philosophy are rather about Metaphysics as he believed in the theory of the "five eternal", according to which the world is produced out of an interaction between God and four other eternal principles (soul, matter, time, and place). There are 19 titles that of them, three are available in English including *Spiritual Medicine*, *The Philosophical Approach (Al Syrat al Falsafiah)*, *The Metaphysics*.

Razi is the developer and discoverer of some Chemical instruments and substances such as distillation equipment to gain alcohol and many extraction methods in chemistry.

If interested, you may study following references to know more details of Rhazes' life and works:

- Iskandar, Albert (2006). "Al-Rāzī". *Encyclopaedia of the history of science, technology, and medicine in non-western cultures* (2nd ed.). Springer. pp. 155–156.
- Elgood, Cyril (2010). *A Medical History of Persia and The Eastern Caliphate* (1st ed.). London: Cambridge. p. 202-203. ISBN 978-1-108-01588-2. "By writing a monograph on 'Diseases in Children' he may also be looked upon as the father of paediatrics."
- Rāzī, Abū Bakr Muḥammad ibn Zakarīyā. "The Book of Medicine Dedicated to Mansur and Other Medical Tracts – Liber ad Almansorem". *World Digital Library* (in Latin). Retrieved 2 March 2014.
- Nikaein F, Zargarana A, Mehdizadeh A. "Rhazes' concepts and manuscripts on nutrition in treatment and health care". *Anc Sci Life*. 31: 160–3. doi:10.4103/0257-7941.107357. PMC 3644752 Freely accessible. PMID 23661862.
- Kamiar, Mohammad. *Brilliant Biruni: A Life Story of Abu Rayhan Mohammad Ibn Ahmad*. Lanham, Md: Scarecrow Press, 2009.
- Rhazes: *His Life and Contributions to the Field of Dermatology*". doi:10.1001/jamadermatol.2016.0144. PMID 28114524.
- Rāzī, Abū Bakr Muḥammad ibn Zakarīyā (1529). "The Comprehensive Book on Medicine—Continens Rasis". *World Digital Library* (in Latin). Retrieved 2 March 2014.
- *A Treatise on the Small-pox and Measles*, Translated by William Alexander Greenhill, Published by Printed for the Sydenham Society [by C and J. Adlrd], 1848, pp. 252
- Deuraseh, Nurdeng (2008). "Risalat Al-Biruni Fi Fihrist Kutub Al-Razi: A Comprehensive Bibliography of the Works of Abu Bakr Al-Rāzī (d. 313 A.h/925) and Al-Birūni (d. 443/1051)". *Journal of Aqidah and Islamic Thought*. 9: 51–100.
- Sarah Stroumsa (1999). *Freethinkers of Medieval Islam: Ibn Al-Rawandi, Abu Bakr Al-Razi and Their Impact on Islamic Thought*. Brill.
- Seyyed Hossein Nasr (1993), *An Introduction to Islamic Cosmological Doctrines*, p. 166. State University of New York Press, ISBN 0-7914-1516-3.
- <https://www.ncbi.nlm.nih.gov/m/pubmed/18976043/>
- <http://www.islamicmedicine.org/alrazi3.htm>