



**Takhrij and Syarah Hadith about Chemistry :  
The Study of the Uniqueness of Iron in a Scientific Perspective**

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**Abstract**

This research discusses the hadith about the privileges of iron. This research method is qualitative through literature study with the approach of takhrij and sharah hadith and chemical analysis. The result and discussion of this research is that iron was popular during the Rosulloh Saw era, because of its special iron content that other metals do not have, although iron can rust and corrosive behind it. The conclusion of this research is takhrij and syarah hadith of the Prophet. about the specialty of iron by chemical analysis has experimental opportunities as well as various benefits for living things.

Keywords : *Chemistry, Hadith, Iron, Syarah, Takhrij*

**Introduction**

This vast and beautiful universe is a gift and blessing from Allah SWT that must be guarded and cared for. There are many views of the universe according to some experts and philosophers. Allah SWT has also explained many things in the scripture al-Qur'an. In this universe, Allah SWT created various metals, one of which is ferrous metal.

Evidence regarding the truth of the scripture al-Qur'an cannot be refuted in this respect. One of the iron phenomena which is the name of one of the 57th chapter of the scripture al-Qur'an and is mentioned in the 25th verse (Sudiarti et al., 2018). Apart from the scripture al-Qur'an, hadith is also used as a guideline for Muslims, where in its capacity as a source of Islamic teachings, hadith does not only contain matters related to worship, but also discusses such as education, science and other matters.

As mentioned above, the reference to hadith as life for Muslims also

discusses matters related to science known as science. One of the things discussed regarding science in the hadith is the hadith about iron (hadiid/ حديد). The term "hadiid", which means iron, is found in considerable numbers in several hadith books (Salma, 2016).

There is a hadith of the Prophet Muhammad Saw. Regarding the Privileges of Iron in Muslim Musnad Number 1450 of the Book of Friday, Chapter of Giving Taklim during the Sermon.

و حَدَّثَنَا شَيْبَانُ بْنُ فَرُّوخَ حَدَّثَنَا سُلَيْمَانُ بْنُ الْمُغِيرَةِ حَدَّثَنَا حُمَيْدُ بْنُ هِلَالٍ قَالَ قَالَ أَبُو رِفَاعَةَ انْتَهَيْتُ إِلَى النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ وَهُوَ يَخْطُبُ قَالَ فَقُلْتُ يَا رَسُولَ اللَّهِ رَجُلٌ غَرِيبٌ جَاءَ يَسْأَلُ عَنْ دِينِهِ لَا يَدْرِي مَا دِينُهُ قَالَ فَأَقْبَلَ عَلَيَّ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ وَتَرَكَ خُطْبَتَهُ حَتَّى انْتَهَى إِلَيَّ فَأَتَى بِكُرْسِيِّ حَسْبَيْتُ قَوَائِمُهُ حَدِيدًا قَالَ فَقَعَدَ عَلَيْهِ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ وَجَعَلَ يُعَلِّمُنِي مِمَّا عَلَّمَهُ اللَّهُ ثُمَّ أَتَى خُطْبَتَهُ فَأَتَمَّ آخِرَ

And after telling us, Syaiban bin Farrukh had told us that Sulaiman bin Al-Mughirah had told us Humaid bin Hilal he said, Abu Rifa'ah said, "I arrived at the Prophet's place when he was giving the sermon. Then I told him. , "Rosulullah, there is someone who deliberately comes to you to ask about religion, he does not know what religion is". So, the Rosulullah came to me and decided on his sermon. When he got to me, was given a chair, I assumed his legs were made of iron for him to sit on. Then Prophet Muhammad Saw sat on a chair and taught me about the religion that Allah SWT had taught him. After that, he continued his sermon until it was finished" (HR. Muslim).

Based on the description above, a research formula is prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a)

The formulation of this problem is that there is a hadith of the Prophet Muhammad Saw about the specialty of iron. The research question is how the hadith of the Prophet Muhammad Saw about the specialty of iron. The purpose of this research is to discuss the hadith of the Prophet Muhammad Saw about the specialty of iron.

### Research Methods

This research method is qualitative through literature and field studies (Darmalaksana, 2020b). While the approach applied is takhrij and sharah hadith (E Soetari, 2015). The interpretation in this study uses an approach with chemical analysis (Istijabatun, 2011).

In general, there are two stages of research on hadith, namely takhrij and sharah. Takhrij is the process of extracting hadith from the hadith book to check its validity, while sharah is the explanation of the hadith text with a certain analysis (E Soetari, 2015). Chemistry itself, as a means

of interpretation in this research, is a field of study as a branch of natural science that studies the composition, structure, properties and changes of matter and energy that accompany it (Istijabatun, 2011).

### Results and Discussion

Initially, the search was carried out through the hadith application regarding the keyword "iron" until the hadith was found in Muslim Musnad Book Number 1450, as previously disclosed.

Table 1. List of Rawi Sanad

No.	Rawi Sanad	Born/Died		State	Kuniyah	Scholars Comments		Circles
		B	D			-	+	
1	Tamim bin Asad		44 H	Bashrah	Abu Rifa'ah		Shahabat	Shahabat
2	Humaid bin Hilal bin Hubairah			Bashrah	Abu Nashr		- Tsiqah - Tsiqah - Tsiqah - Mentioned in 'ats tsiqaat	Tabi'in middle circle
3	Sulaiman bin Al-Mughirah		165 H	Bashrah	Abu Sa'id		- Tsiqah-Tsiqah - Tsabat-Tsabat - Tsiqah - Tsiqah Tsabat - Mentioned in 'ats tsiqaat - Mentioned in 'ats tsiqaat	Tabi'ut Tabi'in the elderly
4	Syaiban bin Farrukh		236 H	Ablah	Abu Muhammad		-Tsiqah -Shaduuq -Shaduuq -Tsiqah -Shalih	Tabi'ut Tabi'in ordinary people
5	Imam Muslim	204 H	262 H	Naisaburi			Imam fi al-hadits	Mudawin

Table 1 is a list of the hadith narrators and the narrators studied. Rawi

is a hadith narrator while sanad is a chain of narrators from friends to mudawin, namely scholars who record hadith in the hadith book (Endang Soetari, 1994). According to the science of hadith, the requirement for a valid hadith is that it must be positive according to the comments of the scholars. If there are comments from scholars who give negative ratings to one of the narrators in the sanad route, then the hadith is a dhaif hadith (Darmalaksana, 2020d). Sahih hadith is a strong hadith while dhaif hadith is a weak hadith (Endang Soetari, 1994). The requirements of a valid hadith must also be continued. If the hadith sanad is damaged, then the hadith is dhaif hadith. Evidence of the continuity of sanad is the meeting between teachers and students. If there is no objective evidence, the meeting between teachers and students can be seen from birth and death. If there are no data on births and deaths, it is estimated that the average age of cleric is 70-90 years. The meeting between teachers and students can also be seen from the narrator's life journey. If the teacher and student are in the same place, it is predicted that the teacher and student will meet (Darmalaksana, 2020d).

The quality of this hadith is a valid. Because, from the narrator's side, there were no comments from the scholars who gave negative assessments. However, from the sanad side, it is cut off in the second rawi sanad, namely Humaid bin Hilal bin Hubairah. However, the validity of this hadith can be strengthened as researchers also find in the Sahih Muslim book, book لباس chapter 106 page 1017, based on the information of Mu'jam Mufahrasyy li al-fazh al-Hadith An-Nabawi volume IV is also found in the book Sunan Ahmad bin Hambal volume 5. Basically, the science of hadith has other parameters in providing reinforcement of hadith. Among other things, hadith is called mutawatir in a very popular sense if the hadith under study is scattered in several hadith books. (Endang Soetari, 2015). Sebaran hadis ini berperan sebagai syahid dan mutabi. Shahid is a kind of hadith while mutabi is another sanad (Darmalaksana, 2020d). The rest, hadith is the virtue of Islamic practice, so it cannot be debated even though it has a dhaif status (Darmalaksana et al., 2017).

The scholars have given syarah, which is an explanation of the content and meaning of the hadith (Darmalaksana, 2020c). According to As-Shobuni in "Shofwatut Tafasir" (2005), "Wanzaln hadiida fiihi ba'sun syadiidun" means "We make and produce iron that has extraordinary strength". This is because the armor is taken from iron, such as armor, arrows, bows and others. Iron can provide enormous benefits to human life, and each production can be ascertained by using iron as a tool (Sudiarti et al., 2018). If we look at the scripture al-Qur'an, it is stated that "in iron there is great strength".(Sudiarti et al., 2018). Iron is a metal that has been known and used for a long time throughout the history of human civilization, starting from just as a simple tool material, modern building construction,

to military equipment and vehicles. (Suhendar, 2011).

The above hadith explains how Prophet Muhammad Saw preached with the editor about Abu Rif'ah who came to him and then asked about religion. In this case we can see the ketawadhu'an, tenderness, sympathy and humility of Rosulululloh towards Muslims. The scholars agree that people who come to ask questions about their faith and how to convert to Islam must be responded to and taught immediately, Rasul Saw, sit in a chair so that people who hear his words and see his personal glory. From the explanation of this hadith, it can be understood that iron can be the basic material for making chairs at the time of the Prophet Muhammad Saw. The existing iron ore is processed by skilled hands in processing iron, either by smelting it or by changing its original form from iron which is then patterned into an iron chair, be it whole iron, or a combination with other objects (Salma, 2016).

This hadith can also be explained according to science, one of which is chemistry. In chemistry, iron has the symbol Fe (Ferrum) which has an atomic number of 26 and 4 stable isotopes, namely Fe-54, Fe-56, Fe-57, Fe-58. This is a special feature where in the scripture al-Qur'an there is the letter *Al-Hadid*, which means "iron" which is the 57th letter in the scripture al-Qur'an, while one of the iron isotopes is Fe-57. Iron is a metal that comes from iron ore and is found in an unrefined state in nature. Iron is widely used for everyday human life and also has high economic value, besides that iron is also the second most abundant metal after aluminum. We can find the use of iron in everyday life, for example for kitchen utensils, building construction, bridges, railroads, the vehicle industry, and so on. The steel known as stainless steel is also a combination of ferrous, chromium, and nickel metals. Not only that, in the human body, iron is an element that plays a role in the synthesis of hemoglobin.

However, from its chemical properties, iron is a metal that rusts easily and is inferior to copper. Iron is also easily oxidized because its reduction potential is quite negative. During use, iron can be damaged due to environmental conditions known as corrosion. Corrosion is the process of degradation of a material due to chemical reactions, especially electrochemical reactions with the environment including air, temperature, humidity, pollution levels and the presence of corrosive chemicals. Meanwhile, efforts to prevent iron damage due to corrosion can be done by coating the metal surface, cathodic protection, adding corrosion inhibitors, and others. Of the several methods, the corrosion inhibitor method is the most practical and easy to do and the costs required are relatively low to inhibit corrosion. Corrosion inhibitors can be defined as substances which, if added slightly to the environment, reduce environmental corrosion of the metal (Sudiarti et al., 2018).

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## Conclusion

Iron is a metal element that cannot be separated from human life. The main benefit is to make the earth fit for life in accordance with the provisions of Allah SWT. Before scientists discovered the element iron, iron has been described by Allah SWT in the scripture al-Qur'an since 14 centuries ago. In addition, iron at the time of the Rosulullah was also used as a tool to care for someone, household furniture, weapons of war and so on. Based on the information provided by the hadith, it is possible for Muslims to study science without having to always refer to information outside the Muslim community's own sources of information, namely the Qur'an and the Hadith of the Prophet Muhammad Saw. What Muslims need regarding the openness of the hadith text regarding this science is a serious attitude and action to explore Islamic texts for the benefit of Muslims themselves. Judging from its chemical properties, iron is a metal that rusts easily and is inferior to copper. During use, iron can be damaged due to environmental conditions known as corrosion. Of the several methods of preventing iron damage due to corrosion, the corrosion inhibitor method is the most practical and easy to do and the relatively low cost required to inhibit corrosion. Corrosion inhibitors can be defined as substances which, if added slightly to the environment, reduce environmental corrosion of the metal. This research is expected to have beneficial implications for scientists in the utilization of iron from the hadith inspiration. This research has limitations as the first research on hadith takhrij and sharah so that further research is needed which is more integrated through chemical analysis. This study recommends the development of iron technology through chemical analysis based on the inspiration of Islamic texts, both the scripture al-Qur'an and the hadith.

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### **Acknowledgement**

The author gives thanks to Allah SWT for providing health and blessings, so that this scientific work can be completed. Thank you to my parents who always said their best prayers at all times. Not only that, this scientific work would not be perfect without the support and professional assistance of Dr. Wahyudin Darmalaksana, M.Ag, as a lecturer in the ulumul hadith subject at Sunan Gunung Djati State Islamic University, Bandung. The author would like to thank Mr. Wahyudin Darmalaksana for his warm support, inspiration and wise guidance. So that this scientific work can meet the requirements for publication.

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