# New Maritime Archaeological discoveries in the Eastern Province of Sri Lanka with special emphasis on Trincomalee to Pothuwil

A. M. A. Dayananda<sup>1</sup> and Mahinda Karunarathna<sup>2</sup>

Maritime Archaeology Unit, Central Cultural Fund, Ministry of Culture and the Arts Galle Fort, Sri Lanka

Email: amadayananda@yahoo.com<sup>1</sup> mahindakandy222@gmail.com<sup>2</sup>

#### **Abstract**

The Maritime Archaeology Unit (MAU) of the Central Cultural Fund (CCF) carried out an underwater Archaeological exploration in the Eastern coastal area (From Trincomalee to Potuvill), from the 13th of July to the 26th of August of 2013. Measured and non measured drawings, photographical and video documentation, applying GPS and remote sensing were used for the exploration. Trincomalee, Batticaloa and Pothuwil are the main selected areas for the survey. The MAU team discovered sixteenshipwrecks and 4 other maritime archaeological sites from the survey. Irakkandi wreck at Nilaveli, HMS Diomede wreck at Uppuweli, Trincomalee, SS Lady McCullum wreck, British Sergeant wreck, Pasikuda Iron wreck, Pasikuda Boiler wreck i and ii, Batticaloa Boiler wreck, SS Brennus wreck (Sakkara kappal or jaggery wreck), Kalmunai Boiler wreck at Batticaloa and Akkaraipaththu Boiler wreck, Thirukkovil Boiler wreck, Thirukkovil Iron wreck, Komari Boiler wreck, Omari Boiler wreck at Pothuwil were uncovered during the survey. The underwater archaeological site at Swami rock, Trincomalee, ancient stone bridge at Kayankerni, old Dutch jetty at, Pasikuda and Buddhist underwater archaeology site at Pothuwil were explored and new information unearthed on underwater archaeology. The history of the wrecks goes back to the Dutch (1602-1794 AD) and British (1798-1948 AD) period of Sri Lanka. Most of the wrecks are steamengine (boiler) wrecks built with iron. A metal anchor and man made stone blocks were found from Swami Rock, and bow sections, stern, propellers and shaft, boilers, and various anchors were found from the wreck sites. Most of the wrecks were found destroyed by treasure hunters.

**Key words**: Maritime Archaeology, Eastern Coast of Sri Lanka, Shipwrecks, Underwater Archaeology sites

## Introduction

The Maritime Archaeology Unit (henceforth MAU) is the pioneer maritime archaeological institute of Sri Lanka. It is the only institute of this nature in Sri Lanka and is administrered under the Central Cultural Fund (CCF) of the Ministry of Culture and the Arts. The year 1992 is a remarkable year for the MAU because it was the year which marked the begining of its activities. Up to the year of 2013 it has completed two successful



decades (Dayananda, 2013; *Fig. 1 Wrecks in Eastern Coastal Area of Sri* Samaraweera, 2013; *Lanka. (Maritime Archaeology Unit, Galle, Sri* Karunarathna et al., 2013). *Lanka)* 

MAU planned to cover the

whole Island of Sri Lanka by continuing and spreading out the explorations that started in the Galle coastal area. The Central cultural fund of the Ministry of Arts and Affairs, Maritime Archaeology Unit, Maritime Archaeological Conservation

laboratory (MACL), Maritime Archaeology Museum (MAM), National Aquarium Resource Authority (NARA), Sri Lanka Navy and also the eastern coastal fishermen provided us with funds and support during our work (Karunarathna et al., 2013).

# Objectives of the exploration

- To find the archaeological and under water archaeological facts from the eastern coast and the sorrounding areas.
- To protect the under water heritage of the explored areas and to make the people aware on Underwater Cultural Heritage (UCH).
- To explore the historical sources and information about ancient harbours those are located in the study area.

# Method used for the exploration

Firstly, we identified the locations that were to be explored and then used primary and secondary sources to get the data we needed from various libraries and in the National Archive Department of Sri Lanka. Online resources were used to get further information and maps. Explorers were equipped with the full diving kit and also used the following instruments in their explorations: BCD (Boyancy Control Device), regulator (second stage), Aqua lungs, masks, fins, diving computer, underwater compass, diving knife, wet suits, different types of ropes, measuring tape and rulers, slates, safety sausage, "GPS" (Garmin 76) and a digital camera (Nikon D 5000). A side scan sonar was used to identify the archaeoloigcal remains on the seabed.

# New Maritime Archaeological discoveries in the Eastern Province of SriLanka

The explorations in the coastal areas of Trincomalee, Batticalo and Ampara districts were done from the 13th of July to the 26th of August of 2012 and were carried out in 3 stages. They were conducted in Trincomalee, Batticaloa and Pothuwil (Fig. 1).

#### **Explorations in and around Trincomalee**

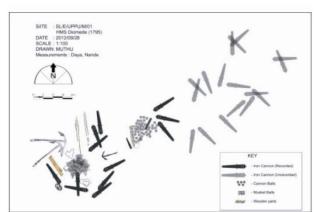
Explorations carried out in this area were conducted from the 13th to 31st of July of 2012. The survey successfully identified twoshipwrecks were explored off Uppuweli

and Irakkandi. In addition to that, Koneshwaram Kovil (also known as "Swami Rock") and the coastal area that belonged to the harbour were explored.

# HMS Diomede wreck discovered from Uppuweli

The Maritime archaeologists were able to discover some remains of a ship sunk at a distance of about 3 km from the 'Silver Beach' and it was discovered at a depth of about 42 m. Priyantha, who is also known as 'Kalu', is a tourist guide and the information provided by him was crucial for this discovery. While this exploration was going on we had did simultaneous research on libraries and as a result of that we were able to reveal substantial facts about this wreck. It was clear that in the decade of the 1960s Arthur C. Clark, Mike Wilson and his group had done underwater filming near this Parewi Island (Pigeon Island) of Trincomalee. As they mention, they had taken a great effort to discover HMS Diomede wreck near the reef that is known as Diomede Rock. However they were unsuccessful (Clark and Wilson, 1964).

According to them, In 1795 the HMS Diomede had sailed towards Trincomalee harbour of Sri Lanka accompanied by other vessels named Suffolk, Centurion and Heroine. The sailors of those three ships had ordered the governor general of Trincomalee to be captured or to under their control. come positive response and the ship had *Lanka*)



The Fig. 2 Drawning of HMS Diomode. governor general had given them a (Maritime Archaeology Unit, Galle, Sri

begun it's voyage again when the ship

sunk, making all of their efforts vain. According to Clark and Wilson (1964) her tonnage was about 887 and there had been 44 cannons. An online survey regarding HMS Diomede revealed a lot of information. According to Clark and Wilson, this ship had been built on 14th of August in 1779 by the firm James Martin Hillhouse, Bristol. It was launched on its auspicious journey on the 18th of October of 1781. This ship had been specially built for the purposes of harbour service during the period of American renaissance and two invasions in which this ship participated were mentioned:

- 1. Invasion of south Caralene region in 1782.
- 2. Invasion of Indian Ocean in 1794

Underwater filming, photography, drawing (Fig. 2), sketches were made, and about eighteen cannons were recorded. We were able to identify a high number of small guns, bullets, broken bottle parts and also some other wooden and metalic artifacts (Fig. 3).



Fig. 3 Artifacts of HMS Diomode. (Maritime Archaeology Unit, Galle, Sri Lanka)

# The ship that was discovered from Irakkandi

We explored the 'No: 234 Grama Niladhari Division' of Irakkandi that belonged to the Nilaweli Secretariat Zone. There we were able to discover a shipwreck located at a distance of about 2.5 km from the Irakkandi lagoon and at a depth of 7 m. The

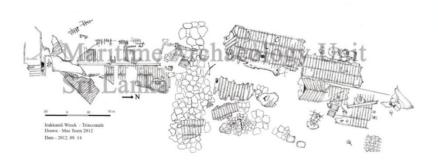


Fig. 4 Drawing of Irakkandi wreck. (Maritime Archaeology Unit, Galle, Sri Lanka)

ship is steel hulled and about 90 m in length. Bow, stern and the Propeller were easily identified. Although the ship had broken

and fallen on two sides most of the parts are still secure (Fig. 4). The parts of the engine were spread over the seabed. There can be seen three anchors, but the cargo of this ship remains unknown. According to archaeological evidence, we can hypothesize that the ship had struck the reef and sunk due to that reason since some parts of the ship have appeared in the reef.

#### Swami Rock in Koneshwaram

We were able to discover a lot of factors through the explorations that were done in Swami Rock (SR) area that belonged to the Koneshwaram Kowil. An underwater exploration of two days enabled us to reveal factors on some summits of stone pillars, well prepared soft stone works and also to reveal a metalic (probably iron) anchor. In the year 1960, Arthur C.Clark, Mike Wilson and other team members carried out underwater explorations near Swami Rock. During the exploration they documented and photographed parts of stone pillars which were appearing like lotus flowers (Clark, 1956: 142). According to a local legend there was a religious place comprising of 1000 stone pillars that was destroyed by the Portugese, who pulled down the stone pillars from the Swami rock (Clark, 1956: 140-145).

### **Exploration in the Batticalo Region**

#### SS Lady McCullum

The second step of the exploration began from Kayankeni, which belongs to the Vakare Secretariat Zone of Batticalo district. A metal hulled shipwreck was found at a distance of about 3 km from the Kayankeni coastal area and it was the first exploration that started regarding this ship. Kolambage Jagath Lal, a diver in that area provided crucial information regarding the work. It is a must to mention the local informants because they too gave us a lot of information. According to them, this wreck is *SS Lady McCullum*, which sunk during the British rule in Sri Lanka.

There our basic target was to identify the nature of a ship that lies on the seabed, to take the measurements, to draw sketches, to video and to take the GPS values

of that particular place. Although the ship is located at a depth of about 17 m and had suffered extensive damaged, it was easy to identify the bow and the stern. The propeler and the propeler's shaft were well protected. Two boilers and three iron anchors were located. The three iron anchors are located in the fore, in the middle and in the aft sections of the ship respectively (Fig. 5).

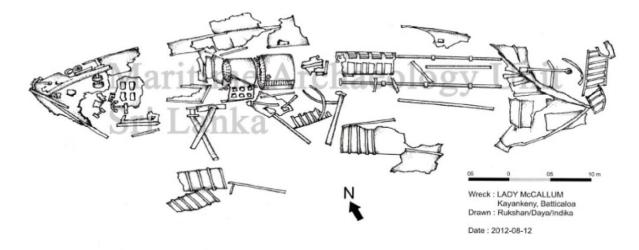


Fig. 5 Drawing of Lady McCallum. (Maritime Archaeology Unit, Galle, Sri Lanka)

While considering the remains of the ship, its length is about 71 m from the bow to the stern and it is about 13.80 m in width. According to our observations, we could assume that some parts of the ship may have been buried under the sandy seabed. On being interviewed, a diver in the area revealed a very important fact. He had sold some iron parts that were taken from this ship and on one iron part he had seen the words "Ally & Macleean" and "CLA" or "CIA Company" (interview conducted on 16-Aug-2012). It is necessary to carry on the existing explorations and present prevailing factors can be changed as a result of those future explorations.

#### **British Sergeant**

British Sergeant had sunk at a distance of 5 km from the Kayankeni coastal area that belonged to the Vakare Secretariant zone. The ship lies at a depth of 25.5 m, through the information of fishermen of the area, we were able to identify the ship as *British Sergeant*. But this name may be changed after future explorations. We

explored a lot of naval ships that were in the eastern province. But among all those ships there was only one ship that is well preserved. It was *British Seargent*. Mainly the ship had separated into two parts and one part is 75 m in length while the other part is 52.80 in length. The width of the stern is 16 m. Our work on the site was limited to drawing of sketches of the ship, taking measurements, and underwater filming and photographing as we had two or three day's worth for the explorations. Village fishermen say that this ship had sunk due to the bombs that were dropped during the Second World War.

# Other Archaeological Heritage Sites of the Kayankeni Region

# **Stone Bridge**

This stone bridge is located west of the Kayankeni junction and it has fallen across the Kayankeni Lagoon. The bridge belonged to the Kayankeni Grama Niladhari division of Vakare Secretariat zone. The bridge has expanded from east to west and expansion of stone pillars of this bridge is about 200 m when looked at from eye level. Some pillars had fall across the lagoon (Fig. 6). The bottom of the pillars were built vertically covered with water to



Fig. 6 Stone Bridge at Kayankerni. (Maritime Archaeology Unit, Galle, Sri Lanka)

some extent. A huge cyclone apparently affected the area and due to that reason, stone chips fell from the pillars (Interview: S. H. Tilakaratna, Ranjith Bandara on 15. 08. 2012). This bridge is known as "Vannadi bridge" to the peple who live in the area. "Vannadi" is a tamil term that means "butterfly". About 2km to east of the Kayankeni stone bridge and about 200m towards land from the Kayankeni coast, there are a lot of ruins spread over land of about few kilometeres. We succeed in revealing a lot of architectural items like different sized stone pillars, *Korawak gal* and *sadakada pahana* (moon stones) from this place and the above mentioned Kayankeni bridge also appears to lead toward this land. That road can be identified

as a road that joins the above stone bridge and the land to the ruins. Local sources informed us that in the past there was a royal school in this ruined area and they believe this road was the way used by the ancient royal princes and princesses to reach this school (Interview: S. H.Tilakaratna, Ranjith Bandara on 15. 08. 2012). While observing the geographical background of this Kayankeni area, we saw this place could have been a sea bay. Therefore it can be identified as a suitable location for a harbour. These factors may suggest a new historical story regarding the Polnnaruwa kingdom, where we would have an ancient harbour and an ancient religious place that was connected to the harbour. But this sit requires further study. We identified three sunken ships from the explorations that were done in the Pasikuda region. Pasikuda, a region that belongs to the Walachchena regional council, is where we found a ship wreck at a depth of 9m and about 3 km off the pasikuda coastal area. It seems that the ship has suffered great destruction because parts of the ship were found spreading on the closest reef in the area. The propeler and the propeler shaft appear well secured and the stern and the bow can be identified easily. We found somewhat large iron anchor through our observation: however, still we are unsuccessful in identifying the ship.

#### Pasikuda Boiler wreck I

Pasikuda boiler wreck is located about 200m off the Pasikuda coast and is in a depth of about 6m, to the north from the above mentioned shipwreck. It has been made of iron and had three boilers for steam power. Propeller shaft and propeller were well preserved (Fig. 7). Three iron anchors were observed, two from the front part and another from the middle part. Researchers were able to take the measurements, draw rough notes, do underwater filming and take the GPS values.

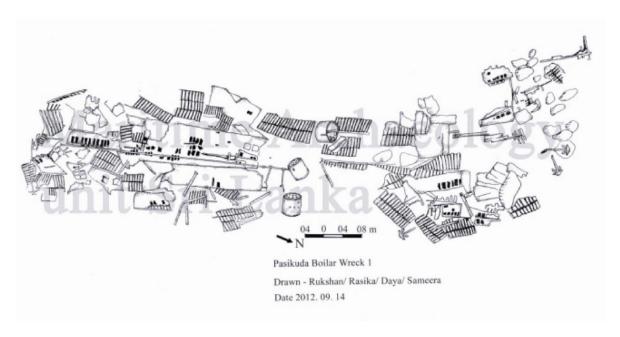


Fig. 7 Pasikuda Boiler wreck. (Maritime Archaeology Unit, Galle, Sri Lanka)

#### Pasikuda Boiler wreck II

The remains of another Boiler wreck was found about 50 m away from the above mentioned Boiler wreck. There can be seen three boilers but one has been destroyed. Here also the propeller and the propeler shaft is well preserved. When considering the expansion of the remaining parts we can say that the ship is about 88 m in length. There are records about a wreckage of a ship that is known as SS Gladys Moller and according to the records, it had sunk in the Pasikuda coastal area. But still we are unsuccessful in confirming the identity of the wreck.

#### Baticaloa Boiler wreck I

This was found by the Nawaladi regional council and it is situated at a distance of about 3 km from the Nawaladi lagoon and at a depth of about 9 m. Still, this is the only wreck we have found with 5 boilers and working with steam power. Propeler and the propeler shaft is well preserved while the stern and the propeler were located in a place that was easy to identify. Maximum length of the wreck is about 102.80 m and in later explorations this shipwreck was identified as *Sir John Jackson*. Information on this shipwreck was known from the Ceylon Observer News paper: "Saturday late in the evening "Sir John Jackson" met with an

accident by striking on a reef at the Batticalo Sea. The ship's total tonnage is 4231 and its pure weight is 2767 tons. Mr. W Green was the captain. This ship had been built in 1905 by the Nothermberland ship building firm of New Castle.it had belonged to the westminister ship firm and had been registered in London.it is 360 feet and 4 inches in length, 47 feet and 9 inches in width and 20 feet and 2 inches in depth. Meses Delmage reed and company is the representative institution of this ship" (The Ceylon Observer, Monday, 28th September in 1908, evening print).

#### SS Brennus

It was found at a distance of about 3 km from the Nawaladi lagoon that belongs to the Nawaladi Divisional Secatrariat Zone and was located at a depth of about 7 m. People in that particular region call this ship as *Sakkara Kappal*. *Sakkara* and *Kappal* are two Tamil words that stand for "jaggery" and "ship" respectively. In 1878 it had been built by Matthew Pearse & Co. Ltd. And its name is *SS Brennus*. On the 7th of July in 1881, the ship had been transporting jaggery from Vishakapatnam of India to London when it sunk. The event happened in the eastern coastal area at adistance of about 3.5 miles from the Batticalo light house (http://www.wrecksite.eu/wreck.aspx?142310). There can be seen boilers on the ship and also the propeller and the propeller shaft is well preserved. The underwater explorations that began in Batticalo were expanded to Kalmune of Ampara district. Information about four ships was recorded from the exploration that was carried out in that zone. Although information about two ships that were in deep waters was recorded, we were unable to study those two ships due to the bad weather that prevailed during those days.

#### Kalmune Boiler and Iron wreck

In Ampara district there is a Grama Niladhari Devision called Kurundedi that belongs to the Kalmune Divisional Secretariate zone at a location of about 3 km from the Kalmune coast, the Kalmune shipwreck is lying at a water depth of 12 m facing the Kodiettam mosque. Two propellers, one propeller shaft and three boilers of the wrecked ship were observed at the site. The maximum length and width of the shipwreck is 102.80 and 33.70 m. The Kalmune Iron wreck is located about 50 m away from the above mentioned shipwreck at a depth of 9 m water depth.

Although the engine parts had faced a greater destruction they can be idenified easily.

# Pothuvil and related exploration in Ampara

The third stage of the explorations were expanded from Batticalo to Pothuwil coastal area and they were carried out from the 19th to the 24th of August 2012. During this exploration we were able to reveal many facts about five sunken ships and also revealed a lot of archaeological factors related to Pothuvil "Muhudu Maha Viharaya" (a Buddhist Shrine).

# Akkareipattu Boiler wreck

It was possible to reveal more facts about another shipwreck from Attalachchena Divisional sectrareant zone of Ampara District. It was identified as a ship that worked by steam power. This ship had wrecked very close to the beach and as a result one half of this wreck has covered with sand while the other half was covered with sea water.

#### Tirukkovila Boiler wreck

This is located at a distance of about 2 km from Tirukkowila coast that belongs to the village Vinayagapuram of Tirukkowila Divisional Secretariat zone in the District of Ampara and it was found at a depth of about 7 m. As a result of the bad visibility and the limited time, we were unable to get a complete idea about the shape of this ship. But it was possible to reveal some factors about it. We were able to explore four boilers from this site. We couldn't find the propeller during the exploration but later it was revealed that the propeller had been taken away by looters. Eventhough we photographed the whole site, there was a minimum visibility and we were unable to draw the rough diagrams and to take the measurements.

#### Tirukkovila Iron wreck

Tirukkovila Iron wreck had sunk very close to the Tirukkowil coast in the village of Vinayagapuram, belongs to Tirukkovil Divisional Secretariate. Some parts of the wreck have come out from the water and they have been destroyed by looters. According to the information of the villagers, we could confirm this wreck as a ship that had sunk in the recent past.

#### Komari Boiler wreck

The remains of this ship can be seen at a distance of about 4km from the Komari coast of the Ampara District and at a depth of about 8 m. Inspite of bad visibility we were able to locate three boilers and the propeller and the rudder are also in safe position. Due to unfavourable weather conditions it was not possible to draw rough sketches, photograph and measurements of the shipwreck.

#### **Omari Boiler wreck**

This wreck is also situated in the zone described above, at a distance of about 5 km off the Omari coast. The bow and the stern were located at a depth of about 7 m and 18 m respectively. During the exploration it was possible to document three boilers and we were able to observe how the broken parts had scattered on the seabed. It seems that the ship had faced great destruction.

#### Conclusion

The Maritime Archaeology Unit of Central Cultural Fund carried out an underwater archaeological exploration in the Eastern coastal area (from Trincomalee to Potuvill), from the 13th of July to the 26th of August of 2013. Drawings, photographical and video documentation, applying GPS and remote sensing were used for the exploration. Trincomalee, Batticaloa and Pothuwil were the selected areas for the survey, whichlocated sixteen shipwrecks and four other maritime archaeological sites from the survey. Irakkandi wreck at Nilaveli, HMS Diomede wreck at Uppuweli, Trincomalee, SS Lady McCullum wreck, British Sergeant wreck, Pasikuda Iron wreck, Pasikuda Boiler wreck I and II, Batticaloa Boiler wreck, SS Brennus wreck, Kalmunai Boiler wreck at Batticaloa and Akkaraipaththu Boiler wreck, Thirukkovil Boiler wreck, Thirukkovil Iron wreck, Komari Boiler wreck, Omari Boiler wreck at Pothuwil were discovered. Swami Rock, Trincomalee, an ancient stone bridge at Kayankerni, an Old Dutch jetty at Pasikuda and a Buddhist underwater archaeological site at Pothuwil were explored and new information unearthed. The history of the wrecks goes back to the Dutch (1602-1794 AD) and British (1798-1948 AD) period of Sri Lanka. Most of the wrecks are steam engine

(boiler) and steel hulled and affected by looting activities. A metal anchor and dressed stone blocks were found from Swami Rock.

# Acknowledgement

Authors would like to thank Profesor Gamini Adikari, Director General of the Central Cultural Fund; W. M. Chandrarathne, Officer in Charge, Maritime Archaeology Unit, Fort Galle, Sri Lanka; Miss Apsara Dayananda and the Members of MAU and MAM, Galle Project, Sri Lanka for their support and encouragement.

#### References

Clark, A. C., 1956. The Reefs of Taprobane. Hapor and Brothers, New York.

Clark, A. C., and Wilson, M., 1964. *The Tresure of the Great Reef.* Harper and Row, New York.

Dayananda, A., 2013. The begginning and evolution of the Maritime Archaeology Unit in Sri Lanka (1960-92). In W. M. Chandrarathne (Ed.), "Samudrika"- Maritime Archaeological Symposium Galle, Maritime Archaeology Unit and Maritime Archaeology Museum, Galle, Sri Lanka: 1-2.

Deraniyagala, S., 1992. *The Prehistory of Sri Lanka: An Ecological Perspective.* Vol. 1, Department of Archaeological Survey, Sri Lanka.

Karunarathna, M., and Dayananda, A. M. A., 2013. New Maritime Archaeological Discoveries in the Eastern province of Sri Lanka. In Senarath Disanayake (Ed.), *Punkalasa – National Archaeological Symposium 2013*, Department of Archaeology, Ministry of National Heritage, Colombo: 217-231.

Weerakatiya, Yasas., 2011. *Mahaurumaya (in Sinhala).* Tilak Printers Ltd, Pannipitiya, Sri Lanka: 01-10.

2004. *Mahawamsha*, Buddhist Cultural Centre, Dehiwala, Sri Lanka.

Samaraweera, N., 2013. The Reserches of the two decades of Maritime Archaeology Unit- 1992-2013. In W. M. Chandrarathne (Ed.), "Samudrika" Maritime Archaeological Symposium Galle Maritime Archaeology Unit and Maritime Archaeology Museum, Galle, Sri Lanka: 3-5.

The Ceylon Observer, September 28, 1908.

# **Biography**

# A.M.A Dayananda

I am A.M.A Dayananda, was born in 2<sup>nd</sup> of March 1969. I am working as a Research Officer on Maritime Archaeology in Maritime Archaeology Unit (MAU), Central Cultural Fund (CCF) of Ministry of Culture and the Arts, Galle Fort, Sri Lanka. I earned my first degree in Bachelor of Arts, special in Archaeology in University of Kelaniya, 1995 and fallowed a postgraduate diploma in Postgraduate Institute of Archaeology (PGIAR), Sri Lanka. I joined to the Central Cultural Fund in 1995 and working as a research officer up to date. I have been participated to a several works shops and training programs on underwater archaeology and related subjects and published over 17 articles in local and international journals.

#### Mahinda Karunarathna

I am Mahinda Karunarathna, was born 5<sup>th</sup> of June 1982, working as a trainee graduate on Maritime Archaeology in Maritime Archaeology Unit (MAU), Central Cultural Fund (CCF) of Ministry of Culture and the Arts, Galle Fort, Sri Lanka / Cofounder of <a href="www.archaeology.lk">www.archaeology.lk</a> & <a href="www.archaeology.lk">www.si.archaeology.lk</a> webs. I earned my first degree in Bachelor of Arts, special in Archaeology in University of Peradeniya, 2007 and fallowed a postgraduate diploma in Architectural Conservation of Monuments and Sites in Department of Architecture, University of Moratuwa in 2010 and reading my Master in Science Archaeology in Postgraduate Institute of Archaeology (PGIAR), Sri Lanka. I have been participated to a several works shops and training programs on underwater archaeology and related subjects and published over 36 articles in local and international journals.