Institute of Archaeologists of Ireland

Event title: "Early medieval iron smelting workshop for archaeologists"

Date: Saturday 7th December 2019

Venue: UCD Centre for Experimental Archaeology and Material Culture

(CEAMC), University College Dublin

Trainer: Dr. Brendan O'Neill, Prof. Aidan O'Sullivan (UCD School of

Archaeology)

Introduction

UCD's School of Archaeology, through the Centre for Experimental Archaeology and Material Culture (CEAMC), are providing a one-day iron smelting workshop. This event will focus on early medieval technologies, allowing attendees to actively participate in an iron smelt. This workshop is part of a series designed to engage with professionals, researchers and interested parties at all levels.

During this event UCD archaeologists and ancient technologies specialists Brendan O'Neill and Aidan O'Sullivan will work with attendees to make iron from bog ore in a clay built shaft furnace. This will include roasting ore, making a furnace and smelting using air bellows until complete. This process will produce a 'bloom' (iron and slag) that will be consolidated (hammered) into an ingot, or 'billet', of iron.

By participating in this workshop attendees will be able to better understand the range of archaeological indicators for iron smelting and their implications. These include the indicative archaeological evidence of burnt spreads, pits, charcoal spreads, fire-reddened soil, furnace fragments, and wastes, generally catagorised as 'slag'.

Please note:

1. This is a practical field based training course. Participants need to bring suitable footwear and clothing taking into account weather (both sun and rain). Participant must also ensure they bring drinking water (c.2 ltrs each).

Learning Outcomes

On completion of this introductory course, the participants will have an understanding of:

1. The main archaeological evidence for iron smelting during this period as well as an overview of the key debates.

- 2. The range of features, technologies and indicators produced in transforming natural bog ore into iron bloom.
- 3. The ability to differentiate different archaeological indicators found during excavation.
- 4. Understand the smelt process through literary sources and practical engagement with the raw material

Programme

9:00 - 9:30	Registration
9:30 – 10:15	Seminar providing archaeological context to the smelt
10:15 – 13:00	Smelting (including roasting ore and making shaft furnace)
13:00 – 13:45	Staggered lunch (Group 1)
13:45 – 14:30	Staggered lunch (Group 2)
14:30 – 17:00	Smelting continued
17:00 - 18:00	Opening furnace, extracting bloom and initial consolidation

Registration:

Members can register their place on this course, by completing the Registration form in the Members Section of the IAI website. An option to pay the course fee via paypal is also available in the Members Section.

Non-members can register on the IAI website and pay the course fee via the paypal link - http://www.iai.ie/cpd/cpd-events/

Please note that as wide range of materials are needed to perform this event fees are being used to offset these costs

Course fee:

Members - €30 Students/ Associate - €15

Non-members - €45 Students/ Associates/Unwaged - €20

Please note: Course fee includes light refreshments, lunch is not included

Parking facilities

Pay Parking is available for participants in University College Dublin (free out of semester during summer months). The course registration fee does not include pay fees incurred in attendance.