```
%%%%%%%%MC Reflectance%%%%%%%%

% See LUT code for function description

y_at_fx_MC = MCref_DM([mua musp],n,freq);

function [ idx_mua, idx_musp, err ] = findOP( y_at_fx_MC )
% find optical properties.
% INPUT:    y_at_fx_MC
% OUTPUT: Optical properties
% NOTE: LUT must be declared as global variable.
global LUT
R_tot=y_at_fx_MC(:,ones(size(LUT,2),1),ones(size(LUT,3),1));
err=squeeze(sum((R_tot-LUT).^2,1));
[~,idx]=min(err(:));
[idx_mua, idx_musp] = ind2sub(size(err),idx);
```